CONTINUED OVERSIGHT OF THE FEDERAL COMMUNICATIONS COMMISSION

HEARING

BEFORE THE

SUBCOMMITTEE ON COMMUNICATIONS AND TECHNOLOGY

OF THE

COMMITTEE ON ENERGY AND COMMERCE HOUSE OF REPRESENTATIVES

ONE HUNDRED FOURTEENTH CONGRESS

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CONTINUED OVERSIGHT OF THE FEDERAL COMMUNICATIONS COMMISSION

TUESDAY, JULY 28, 2015

House of Representatives,
Subcommittee on Communications and Technology,
Committee on Energy and Commerce,
Washington, DC.

The subcommittee met, pursuant to call, at 10:20 a.m., in room 2322 of the Rayburn House Office Building, Hon. Greg Walden (chairman of the subcommittee) presiding.

Representatives Walden, Latta, Barton, Bilippkis

Members present: Representatives Walden, Latta, Barton, Shimkus, Blackburn, Lance, Guthrie, Olson, Kinzinger, Bilirakis, Johnson, Long, Ellmers, Collins, Cramer, Eshoo, Doyle, Welch, Clarke, Loebsack, Rush, Matsui, Lujan, and Pallone (ex officio).

Staff present: Ray Baum, Senior Policy Advisor for Communications and Technology; Andy Duberstein, Deputy Press Secretary; Gene Fullano, Detailee, Telecom; Kelsey Guyselman, Counsel, Telecom; Grace Koh, Counsel, Telecom; Tim Pataki, Professional Staff Member; David Redl, Counsel, Telecom; Charlotte Savercool, Legislative Clerk; Christine Brennan, Democratic Press Secretary; Jeff Carroll, Democratic Staff Director; David Goldman, Democratic Chief Counsel, Communications and Technology; Ashley Jones, Democratic Director of Communications, Member Services and Outreach; Lori Maarbjerg, Democratic FCC Detailee; Tim Robinson, Democratic Chief Counsel; and Ryan Skukowski, Democratic Policy Analyst.

OPENING STATEMENT OF HON. GREG WALDEN, A REPRESENT-ATIVE IN CONGRESS FROM THE STATE OF OREGON

Mr. WALDEN. We will call to order the subcommittee on Communications and Technology, and I want to welcome everyone here today, and wish a very good morning to Chairman Wheeler and Commissioner Pai. Delighted to have you back before the subcommittee again this year. We appreciate the work you are doing at the FCC, and look forward to your testimony, and our opportunities to pursue some issues. At the risk of sounding a bit like a broken record, however, I continue to be concerned with the Commission's failure to adhere to sound regulatory process.

For the nearly 5 years that I have had the opportunity to Chair this subcommittee, as you all know, I have consistently pushed to make the FCC a better, more transparent agency, and yet it seems like the chasm between Commissioners deepens over time. When the Committee considered process reform legislation a few months ago, I had hope we had reached the bottom of that well, that the

Commission would begin to find its way back to the collegiality and honest policy debates and compromises that have characterized it since 1934. Unfortunately, that appears not to be the case. And if Commissioner Pai's testimony is any indication, things might actually be getting worse at the Commission, and that is disappointing, to say the least.

With all that is going on at the Commission, and in the world of communications, we have much ground to cover in today's hearing, which likely will necessitate a second round of questioning. To get things started, let me highlight five areas of policy concern that I, and some other members of this Committee, have. First, the auction. For a successful auction we all know that the sellers and buyers need to fully understand and support the rules. Yet, when it comes to the band plan, questions and uncertainty still abound. Layered on top is growing concern regarding how the re-pack will work, including as it relates to the future of low powered television stations and translators. Now, it was never our intent that these diverse voices in the marketplace would get fully silenced. And then there are the issues of potential interference which have come up, which, as we all know, when mishandled, can doom an auction, as has occurred in the past.

Second, the FCC's action on the designated entity issue raises some concerns for many of us. While the FCC majority claims that its changes will strengthen the integrity of the program, a goal we all share, sadly, I am afraid they simply replace one set of rules that were gamed with a new set yet to be gamed. The Commission's new rules remove the obligation to provide facilities-based service, and permit leasing of 100 percent of the spectrum purchased. Now, that sets the stage for sophisticated spectrum arbitragers, financed by taxpayer dollars, to participate in the next spectrum auction, bringing nothing to the competitive market. The Chairman's advocacy for this outcome is puzzling, given the assurances that the changes would protect the program from "slick lawyers taking advantage of loopholes in the program to unjustly enrich their sophisticated clientele."

Third, the Telephone Consumer Protection Act. My colleague from New Mexico and I have had serious bipartisan discussions about the approach the FCC has taken as it relates to the fundamental nature of democracy and American practical communications in a wireless ago. Beyond that, members of the Subcommittee are just beginning to hear from adversely affected users about the disruption this new ruling will have on a variety of companies, and

the consumers they try to serve.

Fourth, expansion of the Lifeline Program. All one has to do is read today's story in Politico regarding the problems over at the Department of Agriculture's Rural Utility Service to understand why it is so essential, before any agency moves to spend money, it should have tight control and a budget. Unfortunately for rate-payers, in a party line vote the FCC decided to rush forward to expand the Lifeline Program into broadband with little reform, and no limit on the spending.

Fifth, admit the swirl of controversy that continues to surround the actions the Commission takes, let us not lose sight of what is not getting done. For example, the AM revitalization proceeding has been described by some as grinding to a halt, despite the Chairman's assurances to this subcommittee. The quadrennial review of the limitations on ownership of broadcast properties continues to languish, in open violation of the Commission's legal obligation.

Let me close with this. Each member of the Commission is very bright, talented, and thoroughly passionate. And yet, as evidenced by recent public comments of Commissioner O'Reilly, and the testimony today of Commissioner Pai, it is clear that they believe the process at the FCC too often fails to include them in a meaningful and substantive way. And we hear similar complaints from stakeholders who feel ignored or shut out altogether. This is neither necessary nor helpful, as the Commission, and all of us in Congress, try to work through the complicated issues in today's rapidly involving communications world.

And on a final note, on the good news side of things, at least if you have the background I have, I am pleased to note that AT&T today announced that they reached an agreement to allow FM chips in cell phones, making at least the second carrier to do so, and we hope that other carriers will follow suit.

[The prepared statement of Mr. Walden follows:]

Prepared Statement of Hon. Greg Walden

Good morning everyone. Good morning Chairman Wheeler. Good morning Commissioner Pai. Thank you both for joining us this morning.

At the risk of sounding like a broken record, I continue to be concerned with the Commission's failure to adhere to sound regulatory process. For the nearly 5 years that I have chaired this subcommittee, I have consistently pushed to make the FCC a better, more transparent agency, only to see the chasm between the Commissioners deepen over that time. When this Committee considered process reform legislation a few months ago, I had hoped that we had reached the bottom of the well. That the Commission would begin to find its way back to the collegiality and honest policy debates and compromises that have characterized the FCC since 1934. Unfortunately, that hasn't been the case. And if Commissioner Pai's testimony is any indication, things might actually be getting worse. This is disappointing, to say the

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First, the auction. For a successful auction, we all know that the sellers and buyers need to fully understand and support the rules. Yet when it comes to the band plan, questions and uncertainty abound. Layered on top is growing concern regarding how the repack will work, including as it relates to the future of low power television stations and translators. It was never our intent that these diverse voices in the marketplace would get fully silenced. And then there are the issues of potential interference, which as we all know when mishandled can doom the auction, as has happened in the past

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munications in the wireless age. Beyond that, members of this Subcommittee are just beginning to hear from adversely affected users about the disruption this new ruling will have on a variety of companies and the consumers they try to serve.

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Fifth, amid the swirl of controversy that continues to surround the actions the Commission takes, let us not lose sight of what is not getting done. For example, the AM revitalization proceeding has been described by some as "grinding to a halt" despite the Chairman's assurances to this subcommittee. The quadrennial review of the limitations on ownership of broadcast properties continues to languish in open

violation of the Commission's legal obligation.

And let me close with this: Each member of the Commission is very bright, talented and passionate. And yet, as evidenced by recent public comments of Commissioner O'Rielly and the testimony today of Commissioner Pai, it is clear that they believe the process at the FCC too often fails to include them in a meaningful, substantive way. And we hear similar complaints from stakeholders who feel ignored or shutout altogether. This is neither necessary, nor helpful, as the Commission-and all of us in Congress-try to work through the complicated issues in today's rapidly evolving communications world.

Mr. WALDEN. With that, I have used up my time, and turn to the gentlelady from California.

OPENING STATEMENT OF HON. ANNA G. ESHOO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Ms. ESHOO. Thank you, Mr. Chairman, and good morning Chairman Wheeler, Commissioner Pai. Welcome back to the Committee. We are happy to see you, and as I said, we welcome you back.

Today's hearing marks the Chairman's third appearance before our Subcommittee in just over 4 months. In fact, the Congressional Research Service tells me that the Chairman's eight appearances before Congress this year marks a new record. So congratulations, Mr. Chairman. Put that one up on your wall. In the past 14 years no FCC Chair has testified more times before Congress in a single calendar year, and of course we are only in the seventh month of 2015. It is our subcommittee's responsibility to conduct robust oversight, and in so doing we should hear regularly from the Chairman and his fellow Commissioners.

Responsible oversight includes recognition that the FCC—and I think that we should be doing this. There are many things to raise that are legitimate, at least in the minds of those that raise them, but we should include a recognition that the FCC is undertaking an unprecedented series of steps to promote competition, enhance public safety, and ensure that consumers are protected against deceptive or misleading billing practices. Here are a few highlights of the Commission's work over the past year. Modernize the E-rate Program to increase the presence of Wi-Fi in classrooms, and bolster higher capacity Internet connections to the anchor institutions in our communities across the country, our schools and our libraries. Raised a record 44.9 billion, with a B, dollars from the AWS—3 auction. Repealed the outdated and anti-consumer sports black-out rules which, for 4 decades, 40 years, prevented fans from watching games on television when they were not sold out. I think there are a lot of people in the country that are really thrilled

about that. Launched a new consumer help center to streamline the complaint process, and improve how consumers interact with the FCC. And at this point, Mr. Chairman, I would like to ask unanimous consent to place into the record a really terrific article from Forbes entitled, "How the FCC Saved Me \$1,800". If you haven't read it, everyone should, so I ask—

Mr. WALDEN. Without objection.

[The information apears at the conclusion of the hearing.]

Ms. ESHOO. Thank you. Freed up 150 megahertz of spectrum in the 3.5 gigahertz brand for mobile broadband. Established indoor location accuracy rules for wireless calls made to 911. That could be a lifesaving step right there. Adopted bright line rules that prevent broadband providers from engaging in blocking, throttling, and paid prioritization. Levied a \$100 million against a major telecommunications provider for misleading consumers about their unlimited data plans. Pre-empted state laws in Tennessee and North Carolina that prevented local communities from deploying broadband, which they want to do across the country.

All of this and more in just one year, and there is much more ahead as the FCC prepares to undertake the world's first voluntary incentive auction, and a technology transition to an all IP world that preserves the core values of competition, public safety, and consumer protection. So I thank both the Chairman and the Commissioner for your continuing commitment to a modern telecommunications marketplace, and I yield the remainder of my time

to the gentleman from Vermont, Mr. Welch.

Mr. Welch. Thank you very much. Welcome, Chairman Wheeler and Commissioner Pai. We really appreciate the work that you are doing. Just a couple of points. I am very encouraged by the tech transitions progress that you have been making. That is going to be very helpful to many more businesses that need efficiencies, and this is going to be helpful to consumers. I hope you don't stop there. One of my main concerns, I know a concern of many of us, is to have competition as much as possible in this area. We really do believe that that leads to innovation, and better prices for the consumers. So the special access issues continue to be of top concern to me.

And then finally I would like to just remind you of the bipartisan rural working group that Mr. Latta and I have set up, because there is so many of us, even if we represent urban areas, that have rural districts that have special problems, and oftentimes aren't the big markets, so we want to continue to work with the entire Commission to try to make certain that the rural service is there, and will be there, and will be the highest quality. Thank you very much, and I yield back the balance of my time.

Mr. WALDEN. The gentleman yields back, the gentlelady yields back. The Chair recognizes the gentlelady from Tennessee, Mrs. Blackburn.

OPENING STATEMENT OF HON. MARSHA BLACKBURN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TENNESSEE

Mrs. Blackburn. Thank you, Mr. Chairman, and I want to welcome you both. We appreciate that you are here. I will say I dis-

agree with my colleague from California, as she talked about Tennessee. We saw that as stepping on states' rights, Mr. Chairman, and you know that you and I disagree on that. I am pleased that you all are here. I know you all saw the CTIA report last week, and I am sure you have read the op-ed in today's paper by each of your predecessors, Mr. Janikowski and Mr. McDowell. Getting spectrum to the marketplace is where we need to have our focus. And rather than getting off into all these tangential issues, your focus should be the core of your mission, which is dealing with spectrum deployment and usage. And when you look at the expected increase in the wireless arena, it draws more attention to this.

I was thinking, as I was preparing for this hearing, when you go back and look at the industrial revolutions that we have had in this country, looking at the agricultural and the industrial mechanization revolutions, when you look at technology, information, we are almost at a point of being able to say there is this wireless revolution that is going on, because business transactions, health care, so many things are going to depend on this spectrum, and we want to make certain that you are focused on this. So we welcome you. We know that we have to be diligent in this. We look at what South Korea is already talking about doing, South Korea, and Japan, and the 5G, and recapturing the momentum that at one point they had. And we don't want them to be the world leader. We want to be the world leader, and we have got to have you work with us on this.

At this time I yield the balance of my time to Mr. Latta.

Mr. Latta. Well, thank you very much, and I thank the gentlelady for yielding. And I want to thank Chairman Wheeler and Commissioner Pai for being with us again. It is great to see you both, and I look forward to your statements, and also to our questions today.

The communications and technology industry is a very productive and dynamic sector of economy. This is largely due to bright, innovative minds, and in part because this industry has been lightly regulated, with the ability to grow and evolve to the demands of the consumers. Therefore, we cannot afford to overlook the significance of the regulatory policies and how the FCC's decisions impact the industry's success. This is why I am concerned with many of the actions proposed—by the FCC, and the general lack of transparency, efficiency, and accountability at the agency. I hope today's hearing will provide us with an opportunity to discuss in more detail the Commission's policies, decisions, and processes. And I thank the gentlelady for yielding, and I yield back.

Mrs. Blackburn. Yield back my time.

Mr. Walden. The gentlelady yields back. The Chair recognizes the gentleman from New Jersey, Mr. Pallone, for 5 minutes.

OPENING STATEMENT OF HON. FRANK PALLONE, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. PALLONE. Thank you, Mr. Chairman, and thank you to Chairman Wheeler and Commissioner Pai for coming back here today. I know it has been a busy few months since you last testified before this Subcommittee, and I appreciate your willingness to

come and give us an update.

I am particularly grateful for this opportunity to hear from Chairman Wheeler about how he is addressing the priorities of the Democratic members of the subcommittee, many of which are shared by our Republican colleagues. Our members are champions for improving universal access to broadband in the many underserved rural areas of our country. They have also been tireless advocates for the rights of residents of our vast tribal lands, and too often those living on tribal lands are unfairly left on the wrong side of the digital divide. I hope to hear how the FCC can help our efforts to improve deployment to these areas where the economics along are not enough.

Our members have also been devoted to improving public safety communications. This is especially meaningful for those of us whose districts were impacted by disasters like Hurricane Sandy, who believe that everyone should be able to call for help in an emergency, and I hope we hear more about what the Commission

is doing to make our vision into a reality.

Our members also share Chairman Wheeler's commitment to competition. That is why we led the charge to overhaul the FCC's designated entity program. Under the new rules that the FCC recently adopted, the program encourages robust participation from bona fide small businesses, while allowing innovative business models more in line with today's dynamic wireless market. And we have also stood with our Ranking Member Eshoo in her battle to free up more spectrum for unlicensed use. These airwaves can lower barriers to entry, and allow for more vigorous competition.

And finally I hope to learn more about what the Commission can do to support our work to protect consumers. For instance, I know several members of the Subcommittee have been focused on the FCC's recent actions to address robocalls. We all agree that more needs to be done to crack down on unwanted commercial calls, and I hope to hear what the Commission can do to address the issues our members have raised.

I would like to yield 1 minute each of the time—well, I guess a minute and a half to Mr. Doyle, and then a minute and a half to Ms. Matsui.

Mr. Doyle. Thank you very much, Mr. Pallone, for yielding. Thank you, Mr. Chairman, for holding this hearing, and to Commissioner Wheeler and Commissioner Pai, thank you both for being here today.

Mr. Chairman, I would like to recognize the accomplishments of the Commission, and of this Chairman. Since Tom Wheeler took over as Chairman, the FCC has done much to advance our nation's telecommunications agenda. From establishing the FCC's open Internet order, to keeping the incentive action on track, updating the Lifeline Program for the Internet age, and meting out steep fines to telecommunication companies that abuse consumers.

I also want to comment the Chairman for advancing a pro-competitive agenda, both in wire line and wireless service. The Commission's upcoming vote on tech transitions, its action on special access, and the establishment of the spectrum reserve in the incentive auction are all important steps towards preserving and pro-

moting competition. Mr. Chairman, keep up the good work, thank you. And I will yield to our colleague, Ms. Matsui.

Ms. Matsui. Thank you very much for yielding to me. Welcome back, Chairman Wheeler and Commissioner Pai. It is great to see you again. I know you have a busy agenda, and I want to briefly highlight two priorities that I know we are all interested in.

The first is making more spectrum available. Spectrum is our nation's invisible infrastructure of the 21st century. It is critical to keep our wireless economy growing. We need to talk about how to put more spectrum into the pipeline so we can continue to meet the demand. Congressman Guthrie and I have a bipartisan bill to create new incentives for Federal users. We need to continue to explore these solutions.

The second is making broadband access more affordable. Millions of Americans are still on the wrong side of the digital divide. The Lifeline Program can, and should, help these Americans get, and stay, connected. I know the FCC has started work on these very important reforms, but we need to finish the job.

I look forward to working with the whole Commission as we talk about these matters, and hopefully make progress on this. And I

yield back the balance of my time. Thank you.

Mr. Walden. The gentlelady yields back, the gentleman yields back. And I think all time has now expired. So now we will go to our two distinguished witnesses, the Chairman of the Federal Communications Commission, Mr. Wheeler. We are delighted to have you back. Apparently we are really delighted, because we have you a lot, and that is a good thing. And so we welcome you and Commissioner Pai, but Mr. Wheeler, why don't you go ahead and lead off? Yes, it is a modern technology thing.

STATEMENTS OF THE HONORABLE TOM WHEELER, CHAIRMAN, FEDERAL COMMUNICATIONS COMMISSION; AND THE HONORABLE AJIT PAI, COMMISSIONER, FEDERAL COMMUNICATIONS COMMISSION.

STATEMENT OF TOM WHEELER

Mr. Wheeler. I am tempted to make some comment about being national champion of appearances before, but I wouldn't want——Mr. Walden. We can arrange that.

Mr. Wheeler. I wouldn't want to go down that route. But in the 10 weeks—in all seriousness, in the 10 weeks since I was last before this Committee, there has been a lot happening, and I look forward to discussing it with you today. We have made significant progress to begin the incentive auction on March 29, 8 months from tomorrow, so there is a lot of pressure on here. We have continued to grapple with the tech transitions issues that were raised by the movement from analog to IP networks. And we have approved one merger, with conditions. Another was withdrawn, and a new one was added. And then, of course, on top of that, the Appeals Court denied the request for a stay for the open Internet rules.

But one issue which, frankly, caught me by surprise was that which was raised by a letter signed by every member of this subcommittee having to do with local number portability, and I wanted to report directly to you on that. Our rules require that local num-

ber portability be ubiquitous, but it looks as though the manner in which the industry has set up the system does not fulfill that requirement, and I appreciate this committee bringing this to our attention. Implementation of the rule apparently requires that a mobile carrier have a presence in the home market of the ported phone number before the transition can occur. And this is something, of course, that is not possible for smaller regional carriers.

So the effect of this is that if I were to move from Washington to a market served by a carrier not in Washington, and to choose that carrier in a competitive choice process, I couldn't port my number. That is contrary to our rules, and I have asked that it be fixed. Yesterday I wrote the four major carriers, as well as their trade associations, asking that they identify a solution and report back within 60 days. I believe the carriers are in the best position to fix this, and I look forward to their response. But I do want to say to this Committee, after raising this issue in unanimity, that if this approach doesn't fix it with dispatch, we will have to find other approaches that do. But I really appreciate the way that this Committee called that to our attention, because we had not seen that previously.

On another matter frequently raised by the Committee, I am pleased to report that the FCC has completed an exchange of letters with the Telecommunications Agency of Mexico, IFT, to harmonize TV and wireless spectrum on both sides of the border. Mexico is in the midst of its DTV transition, and we, as you know, are heading into an incentive auction and relocation of broadcast and mobile licenses. Where on the spectrum Mexico places its DTV licenses could, therefore, affect us, and our U.S. licenses, and where we place our licenses could affect them. But thanks to the hard work of the International Bureau and the Spectrum Auction Task Force, and the good faith negotiations of the Mexican IFT, this major hurdle has been vaulted. And I want to especially thank my counterpart in Mexico, Chairman Contreras Saldivar, and his Commissioners, for their leadership on this matter. To the North, we have been making similarly productive progress with our friends the Canadians. I believe that once we have a decision next week on incentive auction procedures that we will be able to conclude that coordination as well.

And finally, we have had frequent discussions with this Committee about the open Internet rule. Now that the D.C. Circuit has put it on an expedited track for judicial review, we are only 6 months or so away from that ruling, which I know we all have been waiting for. So thank you, Mr. Chairman, Ranking Member. I look forward to discussing these, and any other issues you may want to raise.

[The prepared statement of Mr. Wheeler follows:]

Statement of FCC Chairman Tom Wheeler

Before the Subcommittee on Communications and Technology Committee on Energy and Commerce U.S. House of Representatives

Hearing on "Continued Oversight of the Federal Communications Commission" July 28, 2015

Introduction

Chairman Walden, Ranking Member Eshoo, Members of the Subcommittee, I appreciate this opportunity to join with my colleague Commissioner Pai to discuss the most recent developments at the FCC. Since we last met in April, I am pleased to report that the Commission has not taken its foot off the gas pedal in our work to spur innovation, investment, and economic growth, while protecting consumers. I look forward to discussing the Commission's most recent accomplishments and previewing our agenda for the coming months.

Recent Accomplishments

The Commission continues to work hard on issues that will help American consumers, enhance U.S. competitiveness, and improve our innovation economy. Over the past three months, we've seen progress on a number of key initiatives.

Open Internet Order

In June, the D.C. Circuit denied the request of broadband providers to stay the FCC's Open Internet Order, allowing the rules to go into effect. This is the right outcome to keep the Internet fast, fair and open. Americans now have a referee on the field to deter blocking, throttling, pay-for-priority fast lanes and other behaviors that could harm consumers and innovators.

The Court also granted the request for expedited review of the Order. We welcome the accelerated litigation briefing and argument schedule, and we are confident we are on sound legal footing as we move forward.

The Court's decision on the requested stay also gives broadband providers the certainty and economic incentive to build fast and competitive broadband networks. The CEOs of Sprint, T-Mobile, Cablevision, Charter, and Frontier have all publically said Title II regulation does not discourage their investment. Recent transactions, both announced and rumored, point to the same conclusion. And, of course, the post-Open Internet Order announcements by AT&T, Bright House, CenturyLink, Cincinnati Bell, Comcast, Cox Cable, TDS Telecom, and Time Warner Cable about their plans to expand their broadband service certainly suggest that healthy network investment will continue under the new rules.

Spectrum

Unleashing spectrum for broadband remains one of the Commission's most effective strategies for spurring economic growth and job creation. At the top of our spectrum agenda is the unprecedented Incentive Auction, and we are advancing a number of actions to put us on track for a successful auction in the first quarter of 2016.

The Incentive Auction will be the most complex in Commission history. It is challenging enough trying to design an unprecedented two-sided auction with more moving parts than a Swiss watch. But the Commission must also balance a range of goals that Congress established, goals that are sometimes competing. These objectives include helping wireless carriers acquire licensed spectrum to meet growing consumer demand; making sure broadcasters are fairly compensated for the spectrum they relinquish; recovering a portion of the value of this spectrum for the public; preserving test beds for mobile innovation by maintaining spectrum for unlicensed use; and promoting competition by providing competitive wireless carriers and new entrants a realistic opportunity to acquire valuable low-band spectrum. Adding to the complexity is that almost all of these goals and design elements are interrelated and interdependent.

For nearly two years, all the interested parties have been jockeying for auction rules that benefit their position. Now is the time to end the back-and-forth, make some hard decisions, and finalize our auction rules. Next month, the Commission will consider a Public Notice establishing the bidding procedures for the Incentive Auction. Thank you to Chairman Walden, Ranking Member Pallone and others on this Committee for their invaluable input on this issue.

Next month, we will also be considering a Reconsideration of our Mobile Spectrum Holdings Order, which established a "market-based reserve" of up to 30 megahertz of spectrum per market in the Incentive Auction for bidders that do not currently hold significant amounts of low-band spectrum, provided that eligible bidders pay their fair share of auction costs. With more than 70 percent of low-band spectrum in the hands of just two providers, we want to make sure that multiple providers have a meaningful opportunity to acquire these valuable airwaves. The Reconsideration Order also assures there will be significant spectrum made available in all markets of the country to all bidders.

In advance of the Incentive Auction, the Commission recently adopted an Order to revamp our outdated spectrum auction bidding policies to help small businesses better compete for a position in today's wireless marketplace. Congress instructed the FCC to reduce the barriers faced by small businesses, including women- and minority-owned businesses and rural service providers seeking meaningful participation in the provision of spectrum-based services. With four national carriers serving 98 percent of mobile customers, it is virtually impossible for individual entrepreneurs to start their own company and compete in this market. This Order revamps our bidding policies to provide small businesses a better on-ramp into the wireless industry. At the same time, our reforms will enhance the integrity of the FCC's auctions and ensure large corporations can't game the system.

Promoting Competition

As I have made plain on innumerable occasions, competition is paramount. It is the best assurance of industry dynamism, that opportunities for improvements in quality and reductions in cost will be pursued assiduously, and that the benefits will be shared with consumers.

As part our rigorous review of multiple proposed mergers, our test is to determine whether or not the transaction is in the public interest, and whether or not a transaction protects and encourages a competitive marketplace is key to making that determination.

Last week we granted – with conditions – approval of the acquisition of DIRECTV by AT&T Inc. (AT&T). The Commission's decision was based on a careful, thorough review of the record, which included extensive economic analysis and documentary data from the applicants, as well as comments from interested parties. Based on this review, we determined that granting the application, subject to specified conditions, was in the public interest.

As part of the merger, AT&T-DIRECTV will be required to expand its deployment of high-speed, fiber optic broadband Internet access service to 12.5 million customer locations and make that service available to E-rate eligible schools and libraries, as well as create a low-income broadband service. In order to bring greater transparency to interconnection practices, the company will be required to submit all completed interconnection agreements to the Commission, along with regular reports on network performance. We also will require an independent officer to help ensure compliance with these and other proposed conditions. These strong measures will protect consumers, expand high-speed broadband availability, and increase competition.

Lifeline

One of this Commission's most fundamental responsibilities is to ensure that all Americans have access to vital communications services. We also have a duty to manage public resources in an effective, efficient manner that advances the public interest. Last month, the Commission approved an NPRM to reform Lifeline, which advances both objectives: exploring new ways to expand access to broadband, while strengthening protections against waste, fraud, and abuse.

In 2008, the Commission expanded the program to allow participation by low-cost wireless providers. Unfortunately, they took those steps without instituting the kinds of controls necessary to protect against abuse. As a result of these decisions, the program almost tripled in size from 2008 (about \$784 million) to 2012 (almost \$2.2 billion). Under Chairman Genachowski, the Commission made significant reforms, including a database that has drastically reduced program abuse caused by multiple Lifeline subscriptions in a household. These reforms helped annual Lifeline spending drop from almost \$2.2 billion to \$1.7 billion, a 23 percent decrease.

Building on the 2012 reforms, our Lifeline reform item proposes streamlining and tightening the process of verifying consumer eligibility by taking it out of the hands of providers. Ideas include establishing a third-party "national verifier," coordination with other federal needsbased programs, and considering the use of direct subsidies to consumers through vouchers. The item also seeks comment on a budget for the program.

But it's not just fixing the program's management that is necessary. We need to modernize Lifeline's focus for the Internet age like our other Universal Service programs. The

NPRM explores proposals such as adopting minimum service standards for both voice and broadband service; whether broadband should be a required offering of Lifeline providers; and how to encourage more competition to improve prices and services.

Robocalls

Over the past several years, hundreds of thousands of consumers have made their voices heard by complaining to the Commission about unwanted telephone calls – calls they didn't ask for, that they don't want, and that they can't stop. In fact, complaints under the Telephone Consumer Protection Act (TCPA), the law that makes unwanted robocalls and texts illegal, are together the largest complaint category we have at the Commission.

Last month, the Commission moved to modernize our regulations to catch up with today's technology and to protect consumers against unwanted robocalls and spam texts. In a package of declaratory rulings, the Commission affirmed consumers' rights to control the calls they receive. As part of this package, the Commission also made clear that telephone companies face no legal barriers to allowing consumers to choose to use robocall-blocking technology.

Tech Transitions

The transition to efficient, modern communications networks is bringing new and innovative services to consumers and businesses. The Commission's approach to these technology transitions is simple: the shift to next-generation networks – using Internet-based and fiber instead of circuit- and switch-oriented and copper – is good and should be encouraged. But advances in technology will never justify abandonment of the core values that define the relationship between Americans and the networks they use to communicate. After an open, rigorous process, I recently circulated two items that would update the FCC's rules to help deliver the promise of dynamic new networks, provide clear rules of the road for network operators, and preserve our core values, including protecting consumers and promoting competition and public safety.

To ensure consumers have information and tools necessary to maintain available communications during emergencies, our new proposed rules would require providers of new, substitute phone services to offer consumers the option to buy backup power. We propose requiring that consumers be notified before the copper networks that serve their homes are retired. This increased transparency will help ensure that new types of services meet the needs of consumers before legacy services are removed. These proposals would also promote competition, notably by ensuring wholesale inputs remain available to competitors that serve businesses, schools, health-care facilities, and other small- and medium-sized institutions. If adopted at the Commission Open Meeting on August 6, these clear rules of the road will give providers the certainty they need to invest, while protecting consumers, competition and public safety.

Empowering People with Disabilities

Twenty-five years ago, our nation took an historic step toward fulfilling the fundamental American promise of opportunity for all when we adopted the Americans with Disabilities Act. The ADA also set the stage for other critical disability laws. In fact, this year, we also celebrate

the 5^{th} anniversary of the Twenty-First Century Communications and Video Accessibility Act of 2010.

The FCC has played a key role in implementing these critical civil rights laws and in harnessing the power of communications technology to improve the lives of Americans with disabilities. The efforts we have already undertaken have had valuable impacts, including improvements to closed captioning and enabling text-to-911 calls. This May, we adopted rules to ensure individuals who are blind or visually impaired can quickly access critical information shown on television in the event of an emergency, and we expanded the iCanConnect Program to provide communications for Americans who are deaf and blind.

The FCC was the first federal agency to use broadband video to allow consumers to communicate with their government using American Sign Language. We are currently working with other federal agencies—and with private sector companies—to embrace this capability.

We are also harnessing the power of the Web to create an open IP-based platform for innovative applications to attack the challenges of individuals with disabilities. Think of it as the FCC building the basic components common to any Web-based application and inviting anyone with an innovative idea to hook on and in the process reduce costs and speed delivery of their application. Already, there are innovative new applications being developed for use by individuals who are deaf and blind. And there is no reason the platform can't also enable applications designed for individuals with physical disabilities.

Positive Train Control

Like the rest of the nation, I was deeply saddened by the fatal Amtrak derailment in Philadelphia. This tragedy was heightened by the fact that Amtrak was only months away from the deployment of Positive Train Control (PTC), a technology that could have prevented it.

Since Congress passed the law in 2008 requiring PTC, the FCC has been working with railroads and Amtrak to ensure availability of spectrum on the secondary market and to approve transactions quickly. During my Chairmanship, the Commission has been involved in helping freight and commuter trains such as Amtrak acquire spectrum, and implemented a historic preservation and environmental review system to fast-track the review of PTC infrastructure. In fact, the FCC approved Amtrak's application for spectrum for the Northeast Corridor two days after Amtrak submitted its finalized application to the agency in March 2015. Be assured that we will continue to do everything in our power to enable the rapid deployment of life-saving Positive Train Control systems.

Consumer Protection

Over the past two years, the Commission has left no doubt that we are willing to stand up for consumers when they have been wronged. We have developed new internal guidelines for identifying and pursuing enforcement cases, resulting in a significant increase in civil penalties and restitutions levied against companies that improperly take advantage of consumers. Most recently, our Enforcement Bureau reached a \$17.5 million settlement with T-Mobile, resolving an investigation into two 911 service outages that occurred on the company's national network last year. The separate but related outages, which together lasted approximately three hours,

prevented T-Mobile customers from reaching first responders when making wireless 911 calls. This enforcement action sends a clear message that communications providers that do not take necessary steps to ensure that Americans can call 911 will be held to account.

Process Reform

Since I arrived at the Commission, improving the way this agency does business has been a high priority. We immediately conducted a top-to-bottom review to identify areas in need of reform, and we have subsequently taken a series of efforts to create a leaner, more efficient, more productive, and more transparent organization. Currently, there are ten active working groups, as well as teams tackling backlogs, streamlining, IT upgrades and many other process reform objectives within the individual Bureaus and Offices.

Thanks to these efforts, we're making decisions faster, increasing speed of disposal on routine matters, expanding electronic filing and distribution, decreasing backlogs, and improving responsiveness to consumers. Others are taking notice. A recent article in Forbes entitled "How the FCC Saved Me \$1,800" proclaimed that "something has been different lately" about the FCC. The author detailed how her ISP improperly billed her business \$1,800 for changing her service and turned her account over to third-party collection. She reached out to the Commission, using our new Consumer Help Center. Two days after filing her complaint with the FCC, her ISP notified her that there we working on the problem, and within a week the charge had been dropped and the issue resolved. You don't want to overreact to one anecdote, but when Forbes is publishing a piece praising your agency for its efficiency, accessibility, and effectiveness, you know you're doing something right.

Field Modernization

One area that presented real challenges and opportunities for improvement was our field activities. It's been more than 20 years since we last examined EB's field structure. Many forms of technology commonly used today didn't exist or weren't widely available back then. Another significant change is a reduction in Commission resources, which necessitated a review of field staffing and priorities.

After a rigorous management analysis combined with extensive stakeholder and Congressional input, including Members of this Committee, the Commission adopted a field modernization plan that will allow our field operations to do more with less.

The resulting plan reflects the review team's thorough, data-driven analysis and concentrates field resources where they are needed most -- areas with the greatest spectrum density. It refocuses field staff on the resolution of public safety and other interference issues. The reorganization streamlines field management, and ensures that all field agents are capable of resolving the complex interference issues posed by new, expanded, and shared uses of spectrum.

Once implemented, this plan will save millions of dollars annually. We'll apply these savings to modernize the equipment used by the field so they can handle the interference issues in the new shared spectrum environment.

This plan isn't a reflection on our field employees. We appreciate their hard work and public service. But this plan is a badly needed reorganization that will focus our limited resources where they are most needed and create a field model for the next 10 years.

Looking Ahead

Before highlighting some items that will top the Commission's agenda as we move into the fall, I want to reiterate my concern with the lack of coordination among 911 call centers, an issue I raised last time I was before this panel.

There are well over 6,000 public safety answering points (PSAPs) in the United States. They do yeoman's work to protect Americans and should be applauded. But the fact remains that absent Federal guidance they remain independent and autonomous without any need to either keep up with technology or coordinate on a state-wide basis.

Over 450 times a minute, Americans dial 911. The vast majority of those calls are placed from mobile phones. The problem is that the physics of mobile signals don't obey the boundaries of the PSAPs. A woman in Georgia trapped in her car drowned while on the phone with the 911 operator just because the call was picked up by the nearest cell tower and routed to a PSAP in a neighboring jurisdiction. We cannot allow that to happen.

In the 1999 law that established 911 as the national emergency number, Congress asked PSAPs to work together on a state-wide basis to coordinate activities. To the best of our information, not one single state has accepted that invitation. Almost 20 years have passed since the 911 Act was passed, during which time wireless has become the predominant vehicle for calling 911. We at the Commission have taken this as far as the authority granted us. Only the Congress can take the next steps to save lives. As we approach hurricane season, I hope Congress will treat this issue with the urgency that it deserves.

FCC Agenda

Looking ahead, we remain committed to harnessing the power of broadband communications to grow our economy and improve the lives of the American people. We will continue to be guided by what I call the Network Compact – a set of values Americans have a right to expect from their network providers – such as universal access, consumer protection, and public safety. Overarching these values is the belief that competition is superior to regulation, and competition is the Commission's most effective tool for driving innovation, investment, and consumer and economic benefits.

Converting universal service programs from their narrowband origins to broadband is among our most important initiatives. That's why the Commission modernized USF to focus on broadband, establishing the Connect America Fund – a process that this Subcommittee has recognized as an essential activity. Just last month, Frontier accepted \$283 million from the Connect America Fund to expand and support broadband to over 1.3 million of its rural customers in 28 states.

It is my goal to reform the broadband support program for small rate-of-return carriers. Working with my colleagues, and particularly Commissioners Clyburn and O'Rielly, we are working with the affected carriers in search of an approach that has the support of the rate of return carriers and is consistent with the policy objectives the Commission unanimously adopted in April 2014. Unfortunately, while I appreciate the carriers' willingness to engage, time is not our friend. I look forward to continued engagement with an eye towards a solution that allows us

to implement meaningful, long-term reforms that have the support of the rate-of-return community.

We continue to implement reforms to the E-rate program. Last year, we improved the program's cost-effectiveness, set specific, ambitious goals for the broadband capacity delivered to schools and libraries – a short term target of 100 Mbps per 1000 students, and a longer term target of 1 Gbps per 1,000 students – and re-purposed funding for Wi-Fi and robust broadband connections capable of supporting cutting-edge, one-to-one digital learning.

These reforms will only have their intended impact if schools and libraries step up to take advantage of new opportunities. Early indications are that they are up to the challenge. Applications are in for E-rate funding for the coming school year, and schools and libraries have responded to the FCC's E-rate reforms by seeking a total of \$3.9 billion in support, including more than \$1.6 billion for internal Wi-Fi networks. Through their ambitious requests, schools and libraries have told us E-rate reform was needed and appreciated. Work is already underway preparing for next year's introduction of other changes we made to the E-rate program to support the expansion of high-speed fiber connections.

To increase opportunities for additional competition in upstream markets, we have proposed a rule to give over-the-top video providers the ability to choose the same business model as cable and satellite providers, with the same program access rights. We expect to move that to a Report and Order this fall. This action should expand video choice – and increase consumer demand – for broadband.

Demand for broadband also is affected by consumers' perceptions about the potential non-monetary costs of using it. We committed in the Open Internet order to address issues of privacy implicated by consumers' use of the Internet. We will begin that process with a Notice of Proposed Rulemaking in the autumn.

Conclusion

Thank you for this opportunity to testify on the FCC's recent activities and upcoming agenda. I look forward to working with you to find common ground and answer any questions that you have about our efforts, successes, and future endeavors.

Mr. WALDEN. Thank you, Chairman, appreciate the update. We will now go to Commission Pai. We are delighted to have you before the subcommittee again, and please go ahead with your testimony.

STATEMENT OF AJIT PAI

Mr. PAI. Thank you, Mr. Chairman. Chairman Walden, Ranking Member Eshoo, members of the subcommittee, thank you for inviting me to testify. This hearing comes at a critical time. The FCC is making judgments that will shape the communications landscape for years to come. I will start with the broadcast incentive auction. The FCC is empowered to conduct this auction because of your bipartisan efforts. It is therefore disappointing that this proceeding has been run in a partisan manner. Time and again Commissioner Mike O'Rielly and I have offered common sense ideas for improving auction rules and procedures. Often, we receive no response at all. When we do receive a response, it is almost always no.

Fortunately, it isn't too late to change course. Broadcasters, wireless carriers, and unlicensed advocates all agree that the Commission's current band plan is seriously flawed. I stand ready to work with these stakeholders, and my fellow Commissioners, to do what Congress did when it passed the landmark incentive auction legis-

lation: compromise to find a consensus solution.

Here specifically is what we should focus on. The proposed band plan allows for too much variability, and would put too many broadcast stations in the wireless portion of the 600 megahertz band. This will both impair spectrum that will be sold in the forward auction, and cause interference between broadcast and wireless services. In my view, the Commission should try to minimize band plan variability. If broadcast stations must be placed in the wireless portion of the band, they should go in the uplink spectrum, not the downlink, or the duplex gap. And, in order to reach a compromise, we also need to make more information public. Right now, stakeholders and Commissioners alike are essentially being asked to take on faith that, unless we adopt every aspect of the Commission's proposals, the incentive auction will end in an apocalyptic failure. But I prefer the Reagan approach: trust, but verify.

Next, I would like to discuss the FCC's Designated Entity, or DE, Program, which has been plagued with abuse. Even though the program is supposed to help small businesses, large corporations routinely try to game the system. And that is why I was disappointed when the FCC recently voted to make it easier for big companies to profit from the program. We were promised FCC action to close loopholes that could be exploited by slick lawyers. Instead, the Commission re-opened loopholes that it had closed on a bipartisan basis years ago, loopholes through which a minimally competent attorney could drive a truck. Specifically, the FCC paved the way for DEs to obtain a 35 percent discount on auctioned spectrum, and then turn around and immediately lease 100 percent of it to a large incumbent carrier.

Now, at the time we were told that opening up new loopholes in our DE rules was an "attack on economic inequality", but this assertion is baffling. So let us be clear, those who will profit from these new DE loopholes are speculators who are already firmly ensconced in the famed one percent. Case in point, under the new rules Donald Trump would be allowed to own most of a DE, get a taxpayer funded discount on spectrum, and then lease all of that spectrum to AT&T or Verizon. So, during the Commission's deliberations, I made simple proposals to prevent this kind of abuse of the DE Program. For example, I proposed that anyone making over \$55 million a year should be prohibited from owning a DE and getting taxpayer funded benefits. Unfortunately, the majority rejected this, and other common sense reforms.

Shifting gears, when it comes to broadband, as Congressman Welch pointed out, too many rural areas are being left behind. Specifically, we are failing areas served by small telecommunications carriers. That is because of a quirk of regulatory history. Our rules governing these carriers give universal service support only to companies that offer telephone service, not standalone broadband service. That is why I put forward earlier this month a specific plan for correcting this historical accident. My plan is based on the principles set forth in a May letter by 115 members of the House of Representatives, led by Congressman Kevin Cramer. This group urged the FCC to adopt an immediate, targeted solution to the standalone broadband problem, and to implement a much simpler and straightforward plan for rate of return carriers than was adopted for price-cap carriers.

I humbly submit that is exactly what my plan does. It implements a single page of rule changes to existing universal service regulations to solve the standalone broadband problem. These simple amendments would let rural consumers choose broadband as a standalone service. It would give carriers the assurance they need to increase broadband deployment. And, critically, they would do

all of this within the existing budget.

Chairman Walden, Ranking Member Eshoo, members of the subcommittee, thank you once again for inviting me to testify. I look forward to answering your questions, and continuing to work with you, and your staff, in the time to come.

[The prepared statement of Mr. Pai follows:]

TESTIMONY OF FCC COMMISSIONER AJIT PAI COMMISSIONER, FEDERAL COMMUNICATIONS COMMISSION

BEFORE THE SUBCOMMITTEE ON COMMUNICATIONS AND TECHNOLOGY OF THE UNITED STATES HOUSE OF REPRESENTATIVES COMMITTEE ON ENERGY AND COMMERCE

"CONTINUED OVERSIGHT OF THE FEDERAL COMMUNICATIONS COMMISSION"

JULY 28, 2015

Chairman Walden, Ranking Member Eshoo, and Members of the Subcommittee, thank you for giving me the opportunity to testify this morning. This hearing comes at a critical time. The agency is making policy judgments that will shape the communications landscape for many years to come. In particular, next week, the FCC is scheduled to make major decisions regarding the upcoming broadcast incentive auction. That's where I will begin.

Incentive Auction.—I have serious concerns about how the incentive auction proceeding is being conducted. To begin with, the Commission has not been transparent enough. This is an exceedingly complex proceeding that requires the agency to make difficult technical decisions. And Congress gave us only one chance to get this right. It is therefore vital that stakeholders are given the necessary information in order to provide us with the feedback that we need to make the right choices. It is also vital that Commissioners themselves receive the data that we need to make informed decisions. But unfortunately, the Commission is falling short of meeting these standards.

For example, in early June, wireless carriers and broadcasters asked the Commission to disclose data regarding the results of six staff simulations of the initial clearing target optimization procedure proposed by the Commission last December. Instead of releasing this data promptly and giving stakeholders a meaningful opportunity to comment on the implications of the staff simulations, the FCC's leadership stayed silent for over a month. But suddenly, just three business days before the July 16 FCC vote on the procedures for the incentive auction, the staff released some of the data, and the Chairman's Office unilaterally waived the Sunshine period prohibition (though describing it as "the Commission['s]" decision) so that parties could comment on the data until the night before the Commission meeting.

There were numerous problems with this approach. For one, the staff did not give stakeholders sufficient time to analyze the new data, attempt to replicate it, and supply the Commission with thoughtful feedback. And Commissioners did not have adequate time to review the comments that were going to be submitted. Moreover, the staff did not disclose all of the data that had been requested by broadcasters and wireless carriers. Given all this, I appreciate the leadership of Chairman Upton and Chairman Walden in calling on the Commission to postpone the July 16 vote on incentive auction procedures. Their intervention was critical to the decision to remove that item from our July meeting agenda.

Unfortunately, the process problems that led to that postponement have not yet been solved. Notwithstanding outside requests, the Commission still won't release all of the data pertaining to the staff's simulations. And again notwithstanding these requests, the Commission won't conduct additional simulations. These are serious mistakes. We should not craft a future band plan based on only two simulations per clearing target and without making publicly available the data from those simulations. Instead, both Commissioners and interested parties should be able to evaluate the wide range of possible outcomes for each clearing target and see all of the relevant data.

For these reasons, I have heard numerous complaints that the Commission has not published enough information to allow the public to assess the validity of the arguments that Commission staff are making in favor of the Chairman's proposals. And I also do not feel that I have been given enough

information to do the same. Right now, Commissioners are simply being asked to take on faith what we are being told, which is essentially that unless we adopt every aspect of the Chairman's proposals, the incentive auction will end in apocalyptic failure. But I, for one, prefer the Reagan approach: Trust but verify.

Moreover, Republican Commissioners continue to be shut out of the process. On July 8, I offered 10 substantive proposals to my colleagues that I believe will help improve the auction's chance of success. Commissioner O'Rielly has also offered thoughtful suggestions. But based on what little feedback I've received to date, it appears that the Chairman's Office is poised to reject virtually all of them.

This is an unfortunate partisan denouement to a process that began with your legislative consensus. It's important to remember that the FCC is empowered to conduct an incentive auction because of the bipartisan efforts in Congress, including within this Subcommittee. It's therefore disappointing that this Commission proceeding has been run in such a partisan manner. Time and time again, Commissioner O'Rielly and I have offered ideas for improving auction rules and/or procedures. Many of these ideas have been quite modest. Often, we receive no response at all. When we do receive a response, it's almost always the same: no. There is no reason why there should be a party-line divide on largely technical matters.

Turning to substance, the issue that's dominated the public discussion of late is the Commission's proposal to put broadcasters in the duplex gap. My position is clear: I oppose it.

However, I also believe that the proposal is the symptom of a larger problem with current incentive auction design. Specifically, the band plan that is on the table right now allows for too much variability and would put too many broadcast stations in the wireless portion of the 600 MHz band. This will impair spectrum slated to be sold in the forward auction and will cause interference between wireless and broadcast services. Following the 700 MHz auction, the Commission and industry were forced to deal for years with the problems created by having channel 51 television broadcast stations right next to A-block spectrum that had been sold to the wireless industry (not to mention the fact that the auction raised significantly less revenues because of these problems). I fear that the proposal that is now on the table, which would lead to co-channel and adjacent-channel interference, would make those problems look like child's play.

To be sure, we will need to allow for some band plan variability because of issues pertaining to the Canadian and Mexican borders. But the current proposal would permit far more variability than is necessary. Both wireless carriers and broadcasters have expressed serious concerns about that proposal and have taken the position that the Commission should minimize band plan variability. I agree.

The claim has been made that we must allow for substantial variability in order to have a successful incentive auction. But the Commission won't release sufficient data to demonstrate the truth of that assertion, and I seriously question whether it is accurate.

This is especially the case when there are common-sense solutions that would let us sidestep these pitfalls. For example, in order to reduce the need to place a large number of broadcast stations in the wireless portion of the 600 MHz band, we could offer broadcasters higher prices, thus enabling the Commission to purchase more spectrum. Or we could change the formula for setting a clearing target in order to choose a less aggressive number depending on the number of broadcasters volunteering to participate in the reserve auction. Either approach should enable us to put fewer broadcast stations in the wireless portion of the band.

Moreover, if we do put broadcast stations in the wireless portion of the band, I am extremely concerned that most of them will be placed in the most damaging place possible. Specifically, the data released by the Commission earlier this month revealed that most broadcast stations are slated to be put in

the downlink portion of the wireless spectrum, with some inserted into the duplex gap and a smattering in the uplink.

This plan flies in the face of the record that has been compiled by the Commission. Wireless carriers have told the Commission that it is better to place broadcast stations in uplink spectrum than downlink spectrum. Why?

First, as Cellular South told us, "mobile broadband providers currently require significantly more downlink than uplink spectrum to meet consumer demand." That's why, as T-Mobile explained, placing broadcasters in the "uplink will impair the less useful—and less valuable—segment of the band pair, which will increase the utility of remaining spectrum as well as the revenue generated by the forward auction, which will increase the total amount of spectrum cleared."

Second, when broadcasters are placed in the uplink rather than the downlink, it is easier for carriers to minimize interference through the use of filters. When TV stations are repacked into the uplink portion, Verizon informed the Commission that "wireless operators can design market-specific base station receiver filters to protect against broadcaster interference." And T-Mobile pointed out that these commercially available base station filters are "cost effective because the LTE base stations are fixed in location and limited in number." By contrast, when broadcast stations cause interference in downlink spectrum, Verizon explained that "it is not possible to use market-specific filtering methodologies in handsets that must be able to roam all areas."

For all of these reasons, placing broadcasters in the downlink spectrum rather than the uplink will make the spectrum sold in the forward auction less valuable. And placing broadcasters in the duplex gap will also cause downlink spectrum to be impaired. All of this will mean less revenue generated in the forward auction, which, in turn, will reduce the amount of spectrum the Commission is able to clear, and ultimately, the chances of holding a successful incentive auction.

The good news is that it isn't too late to change course. Broadcasters and wireless carriers have proposed solutions to these problems. In my view, we need to listen and learn. That's why I suggested that the Commission hold an *en banc* hearing at which all stakeholders could testify directly about these important issues. Rather than attempting to bully a seriously flawed band plan through the Commission on a party-line vote, we should do what Congress did when it passed the landmark incentive auction legislation: work together to develop a consensus solution.

Designated Entity (DE) Program.—The FCC's DE program has been plagued by abuse. Even though the program is supposed to help small businesses, large corporations routinely try to game the system and gain access to discounted spectrum.

Who bears the cost of this abuse? Legitimate small businesses across the country—businesses that are actually building networks and serving their communities, like VTel Wireless in Vermont and Rainbow Telecommunications in my home state of Kansas. American taxpayers also take a hit since we all pay the price when corporate giants snag discounts Congress never intended them to have.

This made it all the more perplexing that the Commission voted this month to make it easier for big companies to profit from the program. In the wake of well-publicized abuses, we were promised FCC action to close loopholes that could be exploited by slick lawyers. Instead, the Commission reopened loopholes it closed on a bipartisan basis years ago—loopholes through which even minimally competent attorneys could drive a truck.

Specifically, the Commission paved the way for DEs to obtain a 35%, taxpayer-funded discount on auctioned spectrum and then turn around and lease 100% of that spectrum to AT&T and Verizon. Such arrangements make a mockery of the DE program. Rather than increasing competition, they will increase consolidation in the wireless market. And rather than helping legitimate small businesses give

consumers an additional competitive alternative, they will give large carriers access to discounted spectrum.

Public interest advocates explained that allowing 100% leasing "would be terrible for taxpayers, who would be underwriting corporate welfare, and for consumers, who would not see valuable spectrum put to its most productive uses." T-Mobile said that allowing 100% leasing "effectively would gut the purpose of the designated entity program" and "increas[e] the likelihood that designated entity benefits unfairly flow to ineligible entities or to speculators that acquire or warehouse spectrum at the expense of actual service providers that need it." Still others remarked that allowing these leasing arrangements "will act like catnip to spectrum opportunists who are less interested in serving underserved areas than with getting rich quick at the public's expense."

Dozens of smaller and rural providers echoed these same concerns. Yet the Commission, on a party-line vote, made it easier for large corporations to abuse the program.

At the time, we were told that this change to our rules was designed to "reflect the realities of 21st century economic opportunity." In some sense, that is sadly true. In the United States today, big businesses and those who are politically well-connected are often able to get ahead by manipulating the levers of the regulatory state to their advantage. Meanwhile, small businesses without Washington influence are left behind. The recent DE decision was yet another example of this.

We were also told that opening up new loopholes in our designated entity rules was "an attack on economic inequality." I find this assertion to be baffling unless we are talking about reducing the gap between hedge-fund millionaires and hedge-fund billionaires. Let's be clear: Those who will profit from the new loopholes are arbitrageurs and speculators who are already ensconced in the famed 1%.

Indeed, during the Commission's deliberations on this issue, I made a simple proposal. Anyone making over \$55 million per year should be prohibited from owning a DE and getting a taxpayer-funded discount when purchasing spectrum. In my view, if your income is in the upper 8-digits, you are not exactly struggling and you certainly don't need the public's help. But the majority rejected this proposal. If the FCC truly believes the new DE rules are designed to be an "attack on economic inequality," it's strange that it affirmatively allowed those making more than \$55 million per year to benefit.

If we were serious about promoting economic opportunity, we would have adopted real reforms that would have stopped large companies from abusing the DE program and given legitimate small businesses a better chance to compete. That would have meant putting a meaningful limit of no more than \$50 million on the discounts that any single company could obtain in an auction. That would have meant putting a bright-line rule in place that prohibited large companies from setting up multiple DEs participating in a single auction. That would have meant strengthening our unjust enrichment rules to ensure that a shell DE couldn't just flip its spectrum to one of our nation's largest wireless carriers after a few years without having to repay its taxpayer-funded discount. And that would have meant preventing large companies from owning a majority stake in a DE to prevent them from siphoning taxpayer-funded discounts through shell companies.

Unfortunately, the Commission rejected these fact-based, common-sense, and widely supported reforms that would have restored public confidence in our DE program and put an end to abuse of the program. They will have to wait for another day.

Rural Broadband.—One of my top priorities as a Commissioner has been to extend digital opportunities to all Americans. And a month ago, while visiting Nebraska and Kansas, I had the privilege of seeing firsthand the opportunities that high-speed broadband can bring to rural America. For small towns, Internet access is critical to creating jobs, promoting entrepreneurship, and binding communities together.

For example, in Diller, Nebraska, a village of 287 people, I met with representatives of the Diller Telephone Company. Since 1899, the Diller Telephone Company has connected people in Diller and surrounding areas to the outside world. Most recently, it's done this by deploying fiber to the home or farm. The company's fiber network has been a boon to economic development in the area.

A great example is C&C Processing, a local meat processor. Thanks to the Internet, C&C has transformed itself over the past 20 years into a nationally known player. From a small, husband-and-wife grocery store and slaughtering operation in the mid-1990s, C&C now employs dozens of people. It sells meat at retail over the Internet and ships nationwide, and its wholesale products can be found everywhere from the PGA Tour to Whole Foods. Chad Lottman (a co-owner of C&C) can use an app to monitor his facilities remotely, and his team can now create electronic inspection records immediately available to the U.S. Department of Agriculture, instead of filling out reams of regulatory paperwork by hand. As Chad and his wife Courtney told me, Internet access, delivered by Diller Telephone, has truly made all the difference.

But when it comes to broadband, too many rural areas are being left behind. Four years ago, the FCC committed to reforming the Universal Service Fund to support broadband throughout rural America—a commitment that echoed the promise of the Communications Act itself to "make available, so far as possible, to *all* the people of the United States . . . a rapid, efficient, Nation-wide, and worldwide wire and radio communication service with adequate facilities at reasonable charges."

Since then, we have made progress for rural Americans living in areas served by our nation's largest telecommunications companies, but we are failing those residing in areas served by the smallest. That's because of a quirk of regulatory history: Our rules governing small, rural carriers continue to provide universal service support only to networks that supply telephone service, not stand-alone broadband service. That regulatory system has increasingly come under strain as consumers flee landlines in favor of wireless and Internet-based (or "over-the-top") alternatives.

Indeed, it has put some carriers to a Hobson's choice. On one hand, they can offer stand-alone broadband—which urban consumers have and rural consumers want—and lose universal service support. On the other, they can deny consumers the option of an Internet-only service, and risk them dropping service altogether (which they increasingly are). The net result is that rural carriers hold back investment because they are unsure if they can deploy the next-generation services that consumers are demanding.

It's time we made good on the promise of delivering broadband to rural Americans. That's why I put forward at the end of June a concrete and specific plan for correcting this historical accident and giving rate-of-return carriers a chance to participate in the Connect America Fund if they want to do so.

My plan is based on the principles set forth in a May letter to the Commission by 115 Members of the House of Representatives, led by Congressman Kevin Cramer. This letter, which was signed by 20 Members of this Committee, called on the FCC to adopt "an immediate, targeted solution" to the standalone broadband problem and to implement "a much simpler and straightforward plan" for rate-of-return carriers than was adopted for price-cap carriers.

That's exactly what my plan does. First, it implements a single page of changes to existing universal service rules to solve the stand-alone broadband problem. Specifically, my plan would include stand-alone broadband costs when calculating high cost loop support and interstate common line support. It would determine how much of that support should be attributed to stand-alone broadband. And it would direct that support be used to offset the cost of service. (My proposed changes to the rules are appended to the end of this statement.)

These simple amendments to our existing rules would have a big impact. They would allow rural consumers to choose broadband as a stand-alone service, and they would give carriers more assurance that arbitrary loopholes won't prevent them from meeting consumer demand. This will increase broadband deployment. They would also meet the FCC's own goals of distributing support equitably and

efficiently and ensuring no double recovery of costs. And they would do all of this within the existing budget.

Second, my plan creates a path so that rate-of-return carriers that want to participate in the Connect America Fund can do so before the end of this year. The FCC's staff have worked diligently to create an alternative cost model for rate-of-return areas (the A-CAM). The model might not be perfect—it wasn't initially designed for small, rural companies, for example. But that is no reason to prohibit participation on a strictly voluntary basis.

The path to permitting voluntary participation by the end of this year shouldn't be hard. In fact, there already appears to be a consensus on key points: Participation should be voluntary. The model should last for 10 years. Support should target unserved locations that will meet the Connect America Fund's 10/1 broadband benchmark. And FCC Form 477 data can form the basis of a streamlined challenge process.

I also believe that if a carrier's support would decrease under the A-CAM, a five-year transition period—two more than the FCC gave price-cap carriers—would be appropriate, and I believe there should be no limit on participation for such carriers. By contrast, if a carrier's support would increase under the A-CAM, numerous volunteers may swamp the rate-of-return budget. Therefore, I am open to using some of the reserves that have built up within the rate-of-return budget over the past few years to fund additional volunteers. But we must be fiscally responsible and prioritize participation for those areas that have the lowest build-out of high-speed broadband.

Earlier this year, in a hearing before the Senate Committee on Commerce, Science, and Transportation, every Member of the Commission committed to solving the stand-alone broadband problem by the end of this year. I believe that my plan presents a simple and straightforward path to accomplishing that goal and expanding broadband deployment in rural America. I look forward to working with my fellow Commissioners and the Members of this Subcommittee to get the job done.

AM Radio Revitalization.—Another area where FCC action is overdue is AM radio revitalization. Every day, it seems harder to get a good AM signal, and we see the impact in the marketplace. AM listenership is down, and advertising revenue along with it. Today, the AM band accounts for less than 20% of terrestrial radio listening in the United States.

That's why in 2012 I called for the FCC to launch an AM Radio Revitalization Initiative. It had been over two decades since the FCC had conducted a comprehensive review of its AM radio rules, and I believed that it was time for the FCC to modernize its regulations to provide AM broadcasters with badly needed relief.

In 2013, the Commission, under the leadership of then-Acting Chairwoman Clyburn, kicked off a proceeding on AM radio revitalization. We unanimously adopted a Notice of Proposed Rulemaking, which sought comment on a variety of ideas for revitalizing the AM band.

Specifically, we proposed a series of regulatory changes to help AM broadcasters address technical challenges, such as eliminating the ratchet rule, which stands in the way of AM stations improving their facilities. We also proposed opening a window for AM broadcasters to obtain FM translators. We know from experience that FM translators can deliver immediate and tangible help to AM broadcasters as we work on solving the band's long-term challenges. But there just aren't enough translators to go around right now. So the Commission proposed to give every AM station the opportunity to apply for its own FM translator.

Commenters provided nearly unanimous support for all of the proposals contained in the NPRM. Large and small broadcasters, civil-rights groups, and Democratic and Republican Members of Congress have all weighed in to support the Commission's approach. Among other things, they told the Commission about the continuing importance of AM radio. In communities across our nation, AM

broadcasters are at the forefront of providing Americans with local news and information, especially when an emergency strikes. And AM radio is also critical for diversity. Most minority-owned radio stations are found on the AM dial and foreign-language stations are also concentrated in the AM band.

Considering the stakes, the facts in the record, and the near-unanimous bipartisan support, I'm disappointed that, almost two years after the FCC kicked off the AM radio revitalization process, the agency hasn't delivered. In fact, we haven't even been given an order to vote on. To be sure, I was pleased to see FCC leadership promise, during the NAB Show in April, that "in the coming weeks" we would see a "Report and Order that will buttress AM broadcast service and ease regulatory burdens on AM broadcasters." But three-and-a-half months have gone by since that statement, and nothing has happened.

I don't understand why it is taking so long for the Commission to move forward on this critical issue. It's certainly not the fault of the staff in the Media Bureau's Audio Division, whose efforts I deeply appreciate. They have worked tirelessly over the past few years on this matter. It is my understanding, for example, that the Audio Division provided a full draft of the order to the Chairman's Office *last year*.

A bureaucracy that springs into action to overregulate markets that haven't failed, like over-the-top video, shouldn't snooze when it comes to markets that actually need our help, like AM radio. I hope that the Subcommittee will urge the Commission to move forward with the AM revitalization proceeding soon. Time is not on the side of the grand old band, and there is no excuse for further delay.

* * *

Chairman Walden, Ranking Member Eshoo, and Members of the Subcommittee, thank you once again for holding this hearing and inviting me to testify. I look forward to answering your questions, listening to your views, and continuing to work with you and your staff in the days ahead.

APPENDIX

Targeted Rule Changes to Support Stand-Alone Broadband

Add 54.303 to read:

§ 54.303 Stand-Alone Broadband Support

(a)

- (1) Expense attributable to C&WF subcategory 1.2 investment in stand-alone broadband transmission service facilities and expense attributable to C&WF category 2 investment in stand-alone broadband transmission service facilities shall be treated as expense attributable to C&WF subcategory 1.3 investment for purposes of calculating high cost loop support pursuant to § 54.1310 and interstate common line support pursuant to § 54.901 through 54.904.
- (2) Expense attributable to Exchange Line CO Circuit Equipment category 4.11 investment in stand-alone broadband transmission service facilities and expense attributable to Exchange Line CO Circuit Equipment category 4.12 investment in stand-alone broadband transmission service facilities shall be treated as expense attributable to Exchange Line CO Circuit Equipment category 4.13 investment for purposes of calculating high cost loop support pursuant to § 54.1310 and interstate common line support pursuant to § 54.901 through 54.904.
- (b) C&WF loops used for stand-alone broadband transmission service shall be treated as working loops (or lines) for each study area for purposes of calculating high cost loop support pursuant to § 54.1310, interstate common line support pursuant to § 54.901 through 54.904, and the monthly per-line limit on universal service support pursuant to § 54.302.
- (c) A study area's stand-alone broadband support shall equal the lesser of:
 - (1) the sum of the amounts calculated pursuant to § 54.1310 and § 54.901 through 54.904 (as adjusted pursuant to § 54.302) multiplied by the ratio of C&WF loops used for stand-alone broadband transmission service over the number of working loops as determined for calculating high cost loop support pursuant to § 54.1310, or
 - (2) the sum of the amounts calculated pursuant to \S 54.1310 and \S 54.901 through 54.904 (as adjusted pursuant to \S 54.302) minus the interstate common line support calculated pursuant to \S 54.901 through 54.904 (notwithstanding the provisions of this section).
- (d) The expense adjustment for purposes of § 54.1301(a) shall equal the sum of the amounts calculated pursuant to § 54.1310 and § 54.901 through 54.904 (as adjusted pursuant to § 54.302) minus the sum of stand-alone broadband support calculated pursuant to § 54.303(c) and interstate common line support calculated pursuant to § 54.901 through 54.904 (notwithstanding the provisions of this section).
- (e) The annual revenue requirement for the interstate Special Access element for a study area shall be offset by an amount equal to that area's stand-alone broadband support.
- (f) Every non-price cap incumbent local exchange carrier must provide the National Exchange Carrier Association with the information necessary to carry out the provisions of this section.
- (g) This section shall be effective beginning July 1, 2016.

§ 54.1301 General

Effective July 1, 2016, amend section 54.1301(a) to replace the phrase "this subpart M" with the phrase "§ 54.303(d)".

Mr. WALDEN. Thank you, Commissioner Pai. We appreciate your testimony as well.

Chairman Wheeler, as you know, LPTV and translators play an important role in providing important information and programming to consumers and businesses, and especially when it comes to the translators serving difficult to reach terrain and rural communities. What do you plan to do to minimize the impacts of repacking on LPTV and translators to help ensure that their important programming continues to reach viewers?

tant programming continues to reach viewers?

Mr. Wheeler. Thank you, Mr. Chairman, and we share your interest in making sure that this voice continues. As you know, the spectrum legislation does not create a re-packing role, a role in repacking, for translators. So the question becomes, what do you do about it? So here is what we are going to do. One, there are channels—we are going to help them find channels, if they get displaced

as a part of the auction.

Mr. WALDEN. OK.
Mr. WHEELER. One of the things that is the reality of an auction is you don't really know where the displacement is going to happen, because you don't know the outcome of the auction. So step one is we will work through that. Step two is that we are going to begin a rulemaking that will allow for channel sharing by LPTV stations. Just as we are counting on channel sharing—

Mr. WALDEN. Right.

Mr. Wheeler [continuing]. In the broadcast auction. And that kind of technology should provide the similar kind of solution. And thirdly, the rule is constructed in such a way that they don't have to vacate until the wireless carrier, in fact, is ready to turn off service. So there is a significant buffer of time in there. But we believe that, as we help them find new channels, and as we have a new rule that allows for channel sharing, that that will be able to mitigate the kind of impact that you are concerned about.

Mr. WALDEN. And aren't you going to also give them—like in the DTV transition there was an opportunity to apply, they got some preference to move.

Mr. Wheeler. I am——

Mr. WALDEN. In the application process. I will get back to you.

Mr. WHEELER. Let me get back to you on—Mr. WALDEN. It was the displacement relief.

Mr. Wheeler. Yes. We are laying out a whole process that will help them through this process in finding those kind of new channels.

Mr. WALDEN. All right. Thank you. I want to talk about some of the financial issues, because you have spoken about them eloquently before the Appropriations Committee, and publicly, and I know that you addressed field agents during a recent agenda meeting regarding the issue of closing the field offices. And you seemed to take special point that your budget comes from Congress and all, which is true.

And I want to ask Commissioner Pai, is it true that the Enforcement Bureau's front office management staff has more than doubled size since 2008?

Mr. PAI. That is my understanding, yes. Mr. WALDEN. Is that true, Mr. Wheeler?

Mr. Wheeler. No, sir.

Mr. Walden. It is not?

Mr. Wheeler. No, sir. The enforcement staff is now-I can give you the exact statistic-20 percent smaller than it was under Chairman Martin, and that, since I have come into office, we have reduced the front office staff by 14 percent.

Mr. WALDEN. OK. Yes, we want to follow up, because obviously

there is a disagreement among you two on this-

Mr. Wheeler. Yes.

Mr. Walden [continuing]. Matter. Isn't it also a fact that the Enforcement Bureau has more vehicles than field agents?

Mr. Wheeler. Yes, sir. Mr. WALDEN. All right.

Mr. Wheeler. I went to Anchorage—I have been trying to

Mr. Walden. Yes.

Mr. Wheeler [continuing]. The offices. We have a policy that says you have to have two employees in each vehicle—one that is driving, and one that is working the equipment. It is like texting and driving. We have two people in the Anchorage office, and we have two vehicles.

Mr. WALDEN. Is that—but we are talking—

Mr. Wheeler. That-

Mr. Walden [continuing]. Across the—it is more than just An-

Mr. Wheeler. This was one of the problems that we inherited when we walked into the door, that there had been this purchasing. So what we're trying to do now is reposition those vehicles-

Mr. Walden. Right.

Mr. Wheeler [continuing]. So they will be available for the

strike teams when they come in.

Mr. WALDEN. And what about—we keep hearing stories that you all have cars and drivers, and all that sort of thing at the Commission. Is that true? Actually, I don't know about you all, I don't have a car and driver, other than my little Prius out there. But is that true? Don't you-

Mr. PAI. Mr. Chairman, it is true—

Mr. Walden. Yes?

Mr. PAI [continuing]. Although I do try to walk whenever I can.

Mr. Walden. It shows. Yes.

Mr. Wheeler. And I have got a-

Mr. WALDEN. All right.

Mr. Wheeler [continuing]. Fitbit to try to-

Mr. WALDEN. Yes. All right. My time has run out.

Mr. PAI. It is not my walking, but-

Mr. WALDEN. Turn to the gentlelady from-

Ms. Eshoo. Thank you. I want to start with Chairman Wheeler. I just want to ask my questions, and then you can respond to them. And I have-

Mr. Wheeler. Yes, ma'am.

Ms. Eshoo [continuing]. One for Commissioner Pai. You said in your opening statement that the upcoming incentive auction has "more moving parts than a Swiss watch", and I agree. And one example is the reserve trigger, which I think is really very, very important. And it is critical that we get it right, because we want to ensure that competitive providers have real access to spectrum. So can you commit to addressing the concerns of the competitive carriers prior to the start of the auction? So that is my first question.

My second question is, some of the medical community have suggested that the FCC delay implementation or consideration of its technical rules for the use of channel 37 by unlicensed TV white space devices. Now, delay is, I think, highly concerning, because this is one of the three channels that tech companies say are, at a minimum, needed in this band to stimulate and sustain investment in enhanced Wi-Fi. So do you think that your proposal already adequately protects patients, and will prevent harmful interference to hospitals? I could ask a lot of questions, but I think that those two are really important.

And also this year, Mr. Chairman, there have been eight broadcast television blackouts involving almost 30 U.S. cities. Can you tell us when the FCC will complete its review of the good faith rules, and when we can expect new rules to be put in place to better protect consumers? So those are my questions to you, and a

quick one to Commissioner Pai.

I read recently, and he is not here, but—something that Commissioner O'Reilly said, and it is a quote of his, but it does deal with the FCC's governing principles. And he stated that one of the FCC's governing principles should be that the Internet is not a necessity in the everyday lives of Americans. And I know that he brought up that it is not even close to being a human right. I don't think that is the jurisdiction of this committee, human rights, but it is disturbing to me that we would move away from that, relative to a principle, and I wanted to know if you agree or disagree, you want to add or subtract from it. So I will go to Chairman Wheeler first, and then to Commissioner Pai.

Mr. Wheeler. Thank you, Ms. Eshoo. Let me see if I can hit those one, two, three.

What we have tried to do is to make sure that there is reserve spectrum available. It has never before been done. As Mr. Welch and others have pointed out, it is an important component of delivering service to rural areas. The question then becomes, after you do that, do you want to create rules that allow people to withdraw from the auction early, and not have to pay as much as if an auction had been ongoing? And that is what is being requested. That is not what is currently in our proposal. We don't think that there should be a quick out, I have got what I want, let me stop the bidding right now for reserve spectrum.

Secondly, we have changed, from 180 meters to 380 meters, the distance that an unlicensed device would be allowed close to these facilities that are using channel 37. That number was arrived at as a result of some studies that were done by the medical telemetry

folks, and so that is why that number was increased.

There is a failsafe in here, however, and that is, as you know, that all unlicensed spectrum has to go through a coordination process that involves a database, where you—

Ms. Eshoo. Yes.

Mr. Wheeler [continuing]. Get permission to use it, if you go by—knowing that there is nobody there. If that 380 meters is insufficient in a particular area because of some rare equipment they have got that database can be adjusted to say, "no, you can't do it here." So I think that what we have done, in regard to medical equipment, is two-fold. One, to expand the absolute blackout area, and two, then to have in there a flexible system that will reflect what reality is and shut down if there is a situation that would cause interference.

In regard to your third question, regarding TV blackouts and good faith negotiations, we intend to have an NPRM out by September the 4th, as this Committee has told us to do, on that topic, and to be discussing exactly what are the full set of issues that should be involved in good faith.

Ms. Eshoo. Yes.

Mr. Pai. Thank you, Congresswoman, for the question. I embrace the FCC's charge as given by Congress. In fact, the first charge in the Communications Act is to make available, so far as possible, to all the people in the United States rapid, efficient nationwide communication services. And in the digital age that increasingly, as you know, means broadband. And I believe that not only because I am a son of rural America, whose parents currently live on the opposite side of the digital divide, but I also have seen it as a Commissioner across this country.

A few weeks ago I was in Dillard, Nebraska, population 287, where I visited C and C Processing, a husband and wife owned meat processing plant that, 20 years ago, was literally a two-person operation, and now, thanks to a broadband connection, they export at retail to every state in the country, and around the world. They have exported wholesale to Whole Foods and-

Ms. Eshoo. So you are saying you disagree with-

Mr. PAI. Well, what I am saying is that I embrace different policies to make sure that broadband deployment is as wide and as deep as possible. I will leave the semantics for others to debate. I am focused on our job, as enmeshed in Section-

Mr. WALDEN. The gentlewoman's time-

Ms. Eshoo. Thank you very much. Mr. WALDEN. The gentlewoman's-Ms. ESHOO. Thank you——

Mr. WALDEN [continuing]. Time has expired.

Ms. Eshoo [continuing]. Mr. Chairman.

Mr. WALDEN. The Chair now recognizes the gentlelady from Tennessee, Mrs. Blackburn.

Mrs. Blackburn. Thank you, Mr. Chairman. OK, Commissioner Wheeler, I want to thank you for your letter dealing with the spectrum auction in small businesses. We got it yesterday, and I may come back to you with a couple of more questions on that. You know my concern, and I appreciate your responses. All right. I think we can all agree that we are for a successful spectrum auction. Everybody agree for that?

Mr. Wheeler. Yes.

Mrs. Blackburn. OK. I am so happy we are all on the same page. Make your day, right? Let us talk about the steps. And, Commissioner, you were just laying out some of the steps you thought were necessary. Let us back it up a little bit. And I think when you look at the CTIA report that came out—I want to submit that for the record, if no one has put that into the record.

Mr. WALDEN. Without objection.

[The information appears at the conclusion of the hearing.]

Mrs. Blackburn. OK. I think that the prelude to a successful auction, and to the steps that you just articulated, is to know how much spectrum that you have. And we know Federal agencies are squatting on a lot of spectrum, and that they are not utilizing it. They are sitting on it just in case they think they might want to do something with it. And when you look at 13 years between the auction and the deployment, that is a lot of time. And you look at the increased usage that we are expecting, I think that it is dangerous to, first of all, not inventory and know exactly what you have got. So, Mr. Chairman, to you, have you inventoried the Federal agencies, and do you know how much spectrum they are squatting on, and what you can recoup?

Mr. WHEELER. First off, Mrs. Blackburn, I would like to identify

with exactly what you are talking about.

Mrs. Blackburn. OK.

Mr. Wheeler. We share the same goals.

Mrs. Blackburn. I am so excited that we agree on something.

Mr. Wheeler. Well, this is—we could be——

Mrs. Blackburn. This is a good day.

Mr. Wheeler [continuing]. Violent agreement as well.

Mrs. Blackburn. Good.

Mr. Wheeler. You know, I-

Mrs. Blackburn. Good.

Mr. Wheeler. When I was President of CTIA, I happened to be the guy that negotiated the first deal with the government to repurpose Defense Department spectrum. Here is what I found, as a way of answering your question about squatting. The Corps of Engineers, for instance, said they were fully utilizing a piece of spectrum because once a month it took a reading on a dam level.

Mrs. Blackburn. Right.

Mr. Wheeler. I don't think that is fully utilizing. So the question we have to work through is how do you encourage Federal agencies, and all users, to think in terms of what is full application? So the answer to your question is we know who uses what spectrum. The specific use inside that spectrum, however—

Mrs. Blackburn. OK.

Mr. Wheeler [continuing]. Is something that the licensee controls.

Mrs. BLACKBURN. OK. I don't want to run out of time. Now, if you know who has how much spectrum, have you put this into one report? Mr. Pai, Commissioner Pai, have you seen a report that says this is how much that is out there? Could you quantify a number—

Mr. PAI. I have not seen a particular report about how Federal users are actually using the spectrum that they have, and I do agree—

Mrs. Blackburn. And how much they have?

Mr. Pai. And it would be very helpful to have that.

Mrs. Blackburn. I think it would too, before we get too far down this road. What I would like to ask you to do is quantify this. And you and I know, all of us know, the way you can re-pack this, and tighten it up, you can better utilize the spectrum, but these Federal agencies—yes, I have got to tell you, we have just done an IG report on wasteful spending, and not following what the IG has asked them to do, looking at 4 years of these IG reports. If you don't force the issue, they are not going to take the action. And spectrum is a very valuable commodity right now, and we cannot allow Federal agencies, through laziness, or lack of creativity, or lack of innovation, to squat on this spectrum.

So, before we get too far afield with the 350 megahertz auction and further, I would like for you to come back to us and say, this is what each of these different departments has, and this is what their utilization is, and this is how we can pull that back and redeploy this into the marketplace and auction it. Because if we need a Federal override for something, just like with the AM band, come back and do something like that, but don't let them squat on this

spectrum.

Mr. Pai, before my time has run out. I will come back for the second round. Yield——

Mr. WALDEN. All right, the gentlelady's time has expired. We will

now go to the gentleman from New Jersey, Mr. Pallone.

Mr. Pallone. Thank you, Mr. Chairman. Chairman Wheeler, I have three questions in three different areas I want to try to get in, so I am going to ask you to respond fairly quickly, if you can. You committed that the FCC would complete a proceeding by the end of this year to make our wireless networks more resilient—this deals with communications and emergencies—and I wanted to thank you again for that commitment. Last week former Commissioner Adelstein promised that the tower industry would work closely with your staff to install new rules for network resiliency. We are approaching the heart of hurricane season, and the third anniversary of Sandy is almost upon us, so what is the status of the FCC's proceeding on network resiliency?

Mr. Wheeler. So we are working with the industry on that, Mr. Pallone. It is essential that a tower be able to stand up. I think we probably also have to address the backup power issue because if you don't—if the tower is standing, but there is no juice to it, so it is not worth anything, so these all fit together into a total package. And I would be happy to do a more detailed response on that, if you would like.

Mr. PALLONE. OK. If you do have something you could update us with now, through the Chairman, I would like to maybe have a written response, if we could, without objection.

Mr. WALDEN. All right.

Mr. PALLONE. Thank you. Then the second question is, with regard to designated entities, in my opening statement I mentioned I support your recent decision to modify the FCC's designated entity rules, and since the rules have passed, however, I have heard criticism that just as the FCC closed some loopholes, it opened others. So how do you respond to those critics that question these decisions?

Mr. Wheeler. I think that we have tightened up the rules substantially, and would be happy to discuss the specific ways in which we have done that. I have got to be real careful at how I talk about this, because it is a pending proceeding, but if you look at what is currently on the record with regard to the DEs and their relationship with Dish in the AWS-3 auction, we used a totality of circumstances test that had never been applied before to say, we don't think that that is a good idea, at a staff level. That is coming to the Commission, so, again, I have to rule on that, so I won't go any further.

The fact of the matter is that we then took that totality of the circumstances and put it into the DE rules in this re-write that we just did. So I think that we have shown that there is a total picture you have to look at, one, and two, that we have whatever it takes

to step up and blow the whistle and say, "that is not right."

Mr. Pallone. OK. With regard to the incentive auction and consumer outreach, as we head towards the incentive auction in the early part of next year, I become concerned about whether consumers will be prepared for the transition. In many ways, this education effort will be even more difficult than the one we faced with the digital TV transition, because we don't have funding for consumer outreach this time, and we will have to deal with a flash cut.

So I raised this issue with the National Association of Broadcasters, and I can say that they committed to working with us to start planning on how best to reach out to consumers. My question is, can you commit to working with us and the broadcasters to devise a comprehensive plan to ensure that consumers will know what they need to do to continue to watch over the air TV?

Mr. Wheeler. Yes, sir. Mr. Pallone. OK. You have actually answered all this in 4 minutes, so I will yield back the balance of my time.

Mr. WALDEN. Well done.

The Chairman now recognizes the gentleman from Texas, Mr. Barton, up next.

Mr. BARTON. Thank you, Mr. Chairman, and thank you and the Ranking Member for this hearing. Thank our two Commissioners,

the Chairman, Commissioner Pai, for being here.

I am one of the advocates for low power television, and, as we all know, they don't have any real standing in this repackaging of the spectrum, if the mainline broadcasters give it back. But they do have a product. They have provided valuable service to the country, and I would like to see them helped in some way, if at all possible. So my question to both of you, we will start with the Chairman, and then Commissioner Pai, what can be done to ensure that we still have low power television once this repackaging is complete?

Mr. Wheeler. Thank you, Mr. Barton, and I would like to associate myself with this position that you have taken. Low power is an important voice in the community, and translators as well. I set up a special meeting with low power operators out at the NAB last year, at their big convention, to make sure that I was hearing from them, and we were talking about it. I think that there are multiple things that we can do inside the statutory constraint that you referenced. One is that we will help them find new channels after the moving of the—firstly, we don't know which low powers are going to be affected, because we don't know what is—

Mr. BARTON. Right.

Mr. Wheeler [continuing]. Going to happen in the auction. We don't know what is going to be available for them to move, so we don't know what is going to happen there. So we all have to kind of sit in limbo, and watch for that. But then, even beyond that, we are going to begin a rulemaking from which we will allow low power and translators to share a channel, just like we are allowing licensees—broadcast licensees, full power licensees, to share a channel. That will take advantage of the benefits of digital, and create another path.

Mr. BARTON. So you do see that there will still be a role for low power television?

Mr. Wheeler. Yes, sir.

Mr. BARTON. OK. Mr. Pai?

Mr. PAI. Congressman, I share your assessment, and the Chairman's assessment, that low power television provides valuable service in Texas, Utah, Nebraska, all across this country. And that is why I flagged, almost 3 years ago, the importance of making sure that, within the statutory constraints, the FCC does what it can, in the context of the incentive auction, especially in markets where we don't need spectrum, to help them stay in business.

My concern is, however, that certain of the policy cuts that we are on the brink of making might end up impairing LPTV, and the vacant channel proceeding is one example of that, where the FCC has said, OK, if there is a vacant channel, or two vacant channels available after the incentive auction, then we will reserve those from unlicensed uses. And, not to denigrate, obviously, the importance of unlicensed, but nonetheless, this is the TV band that we are talking about, and if LPTV stations don't have a place to go, it seems to me that we should do what we can to prioritize their staying in business.

Mr. Barton. Thank you. Thank the both of you, and with that, Mr. Chairman, I yield back.

Mr. WALDEN. The gentleman yields back. The Chair now recognizes the gentlelady from California, Ms. Matsui, for 5 minutes.

Ms. Matsul. Thank you, Mr. Chairman.

Mr. Doyle. Mr. Chairman—

Ms. Eshoo. Mr. Doyle.

Mr. WALDEN. I am just going by the list that your staff—

Mr. DOYLE. I was here well before the gavel—

Mr. WALDEN. Well-

Mr. BARTON. I will give my 2 minutes to Mr. Doyle. I had a minute 55.

Mr. WALDEN. I am just going by the list your staff provided, so—

Ms. Matsul. I don't want to get in the middle of this.

Mr. WALDEN. We will go with whatever you want.

Mr. DOYLE. You don't go in order?

Mr. Barton. If Mr. Doyle will vote for my bill——

Mr. Doyle. I will yield to Ms.—

Mr. BARTON [continuing]. To repeal the ban on crude oil exports—

Mr. DOYLE. I am going to yield to Ms. Matsui. Go ahead.

Mr. WALDEN. I am just going by your list, so go ahead, Ms. Matsui.

Ms. Matsul. Thank you very much, and Mr. Doyle, thank you

very much too.

Chairman Wheeler, after next year's incentive auction the FCC would have implemented the last auction Congress identified in the 2012 Spectrum Act, yet consumer demand for wireless services that rely on spectrum continues to explode, and we know it takes a long time to plan for any new spectrum auction. Mr. Chairman, do you agree that we need to create a spectrum pipeline for the next decade?

Mr. Wheeler. Yes, ma'am.

Ms. Matsul. OK. Now, what do you think are the first steps for

the policymakers to consider?

Mr. Wheeler. Well, I think that you and Mr. Guthrie have pointed a way towards that by providing some Congressional oversight and encouragement in the process. As Mrs. Blackburn indicated, clearly the FCC has a role to say, "OK, where are the current allocations?" But it then goes to the Executive Branch to determine the allocation within—

Ms. Matsul Yes.

Mr. Wheeler [continuing]. Specific executive agencies, and to answer those questions. I would look forward to working with—and we do have a good working relationship with NTIA and—to try and address these issues. I think that this is something that both NTIA and the FCC can work together on.

But I also need to be really candid and say that the kind of leadership that you and Mr. Guthrie are showing, that this Committee has shown, in keeping the spotlight on, and keeping the pressure

on, is essential to paying attention to things downtown.

Ms. Matsul. Well, we intend to keep the spotlight on, so thank you. Congress tasked the FCC with balancing many priorities in the upcoming incentive auction, unleashing new spectrum for licensed mobile broadband, protecting consumer access to local broadcasting, and creating new opportunities for unlicensed spectrum use. If done right, the FCC can ensure that the incentive auction clears a significant amount of beachfront spectrum needed to fuel our wireless economy, while protecting over the air broadcasting, and preserving the chance for unlicensed innovation.

I know a lot of concerns have been raised, and that the FCC is scheduled to make some key decisions at your August meeting. Chairman Wheeler, what is the FCC doing to make sure stake-

holders can feel confident in the incentive auction?

Mr. Wheeler. Well, thank you, Congresswoman. The challenge of the incentive auction is like a very complex crossword puzzle, except for the fact that there is no picture on the front of the box, OK?

Ms. Matsui. Yes.

Mr. Wheeler. And so what we have been trying to do is to make sure that, of all the parties that are interested, that they can walk away with a solution. It may not be what they have come in and asked for. And as a person who used to also go in and ask the FCC to do things my way on spectrum auctions, I know it doesn't always have to be that way, but you need to make sure that, for instance, as Ms. Eshoo and I discussed for medical devices, that you have an answer there, that you have an answer for wireless mics, that you have an answer for unlicensed spectrum. And all of these have to balance out. And I believe that the item that we are bringing forward contains that kind of balance. Would I like to tweak it here or tweak it there, certainly, but you push here, and something—

Ms. Matsul. Yes.

Mr. Wheeler [continuing]. Busts over here. And so I think that the spectrum auction team, headed by Gary Epstein and Howard Symons, have done an excellent job in wading through all of this.

Ms. Matsul. OK. I am going to ask you too, are we on track to see the incentive auction successfully completed next year in a way that preserves the goals that Congress intended?

Mr. Wheeler. Yes, ma'am.

Ms. Matsui. OK. I am a longtime advocate for modernization of the Lifeline Program. Broadband is a necessity, whether it is applying for a job, growing a small business, or parents helping their kids with homework, and I applaud the FCC for starting a rule-making earlier this year to bring Lifeline into the 21st century. Mr. Chairman, what are the next steps for Lifeline reform?

Mr. Wheeler. I hope that we will have a rulemaking to follow up on the Notice of Proposed Rulemaking as soon as comments are closed, and we can sift through them and move forward. Let me address an issue that Commissioner Pai was dealing with a moment

ago. Broadband is the information pathway——

Ms. Matsul. Yes.

Mr. Wheeler [continuing]. Of the 21st century, and to deny access to that is to deny access to the 21st century.

Ms. Matsul. Right.

Mr. Wheeler. I think we need to have policies that make sure that everyone in America has access to that essential pathway of the 21st century.

Ms. MATSUI. I agree with you. Thank you very much, and I yield back.

Mr. WALDEN. The gentlelady's time has expired, and yields back. The Chair now recognizes the Vice-Chair of the subcommittee, the

gentleman from Ohio, Mr. Latta.

Mr. Latta. Thank you very much, Mr. Chairman, and again, gentlemen, thanks for being here. Commissioner Pai, if I could start my questions with you. We all know that consumers are offered an array of video choices today, and new Internet delivered options are also complimented by the growing use of consumer apps to watch traditional TV on mobile devices. As a result, it seems that more online entertainment options, such as Netflix, and other over the top providers have transformed the marketplace. I am going to ask these couple questions. With that said, Commissioner, what is your assessment of the video marketplace, and can you remember a time when consumers have had so much choice in that market?

Mr. PAI. Congressman, thanks for the question. I can't think of a time when consumers of video services have ever had it better.

Having grown up in the era of three broadcast stations, and no satellite, and no cable, I can tell you that now, when I can power up Crackle on my laptop wherever I want, on whatever device I want, it is really a benefit. And I think that is part of the reason why I came out a couple weeks ago, and said that I don't think that the FCC needs to regulate so-called over the top video. And that is consistent with what the Digital Media Association, which represents Apple, Amazon, Pandora, Sony, YouTube, and others, said just last week. This is not a marketplace that has failed. It is thriving, and let us leave well enough alone.

Mr. LATTA. So, in your opinion, that is what is driving innovation?

Mr. PAI. Absolutely, and that is one of the great things about the broadband revolution, that all these business models are thriving because everyone can deliver these services over the Internet.

Mr. LATTA. OK. Let me follow up with this. Should the government be out there picking winners and losers in this space, or trying to impose new technology mandates to potentially so that—slow that innovation and limit that choice?

Mr. PAI. Absolutely not. I think the worst thing the government could do would be to regulate either the entire marketplace, or pick out particular business models for disparate regulatory treatment. That will simply serve to distort the marketplace, and we will never know which business model consumers really would prefer.

Mr. Latta. Thank you. Turning to you, Mr. Chairman, if I may, my district is Northwest/West Central Ohio, and you are kind of familiar with it in your days back in Ohio. I have a lot of general community hospitals, and other larger hospital associations in my district, and a number of these hospitals have expressed a very serious concern to the Commission regarding the technical rules for the use of the channel 37 by unlicensed TV white spaces devices.

It has already been decided that channel 37 will be available for use by unlicensed devices in part of the incentive auction proceedings, however, technical rules that protect wireless medical telemetry service, WMTS, systems and also allow for the safe use of the TV white spaces devices that have not been mutually agreed upon. Let me ask you, do you agree that because wireless devices could cause harmful interference to hospital operations, and jeopardize patient safety, it is vitally important that all parties have the opportunity to work cooperatively to reach a consensus industry agreement on this issue before the Commission considers it in the August open meeting?

Mr. Wheeler. So I agree that there is a technological challenge that we have to make sure that we deal with, and I believe that we have a belt and suspenders approach to that. The belt is to say that 380 meters from such a site is a no-go zone, which is essentially tripling of where we were before in response to what the WMTS folks have said, and some of the trials they have run up in

Minnesota.

But the suspenders are also that the coordination database, that must be used for unlicensed purposes, gets information fed into it if there is a problem in Northern Ohio or a particular area, and that then becomes a no-fly zone. And so what we have put in place is hard rock, and flexibility, that is going to deliver the kind of se-

curity that I think that both you and we are looking for.

Mr. LATTA. But do you think they have enough time to make sure they get that information to the Commission before your August meeting? Do you think there is enough time? Because, here we are on the 27th of July, or 28th that we are right at that point?

Mr. Wheeler. So they have just submitted to us additional information from these field tests, and it was based upon that that we altered what our proposal is. This is not an issue that hasn't been dealt with since you passed the Spectrum Act. This is something that has been going on for multiple years. Their tests were really helpful in that regard. That is why we tried to make sure that we harmonize with the kinds of things that they discovered in those tests, and provide the flexibility to move in and do something if, in fact, there is an aberration.

This kind of goes to Mrs. Blackburn's point about sharing. This is the whole reality about sharing, that we want to create a structure that says that you can deal with the aberrations. And this Committee told us in statute to do that, and that was a wise decision on your part, and we are following through on that.

Mr. LATTA. Well, thank you. Mr. Chairman, if I may, I would like to submit for the record a statement from the American Hospital

Association.

Mr. WALDEN. Without objection.

[The information appears at the conclusion of the hearing.]

Mr. Latta. Thank you.

Mr. WALDEN. The Chair now recognizes the gentleman from Vermont. Just kidding. Mr. Doyle from——

Mr. DOYLE. Boy, that—

Mr. WALDEN [continuing]. Pennsylvania.

Mr. DOYLE. That would have really gone bad.

Mr. WELCH. Mr. Chairman, if your goal was to get his attention, you succeeded.

Mr. WALDEN. Just wanted to make sure he was awake. Mr.

Doyle.

Mr. DOYLE. Thank you, Mr. Chairman. Gentlemen, welcome. Commissioner Pai, I was just listening to your opening statement, where you were lamenting how you and Commissioner O'Reilly have all these wonderful ideas that are met with either no response, or no. And I just want you to know, we on the Democratic side, we are feeling your pain. It is called being in the minority.

Mr. WALDEN. Would the gentleman-

Mr. DOYLE. We know that feeling.

Mr. WALDEN [continuing]. Just for a second. We have been informed by the folks that do the streaming, Mr. Wheeler, if you could pull that microphone closer? In the Internet Age, they are not

able to hear you quite as well, so—

Mr. Doyle. Thank you, Mr.—we feel your pain, I just want you to know. Chairman Wheeler, I have questions for you. I know, like me, you are a strong advocate for a competitive telecommunications marketplace, and you have been a great advocate in moving these long stalled issues forward. I have a number of questions and concerns about the special access proceeding. First, I am concerned that the window for moving forward on special access reform is

narrowing, particularly with this latest extension of the comment window. Additionally, I have heard that the FCC still hasn't made the data from the special access data request available to the stakeholders. With the comment deadline looming, when will the stakeholders be able to access this data in order to make fully in-

formed comments for the proceeding?

Mr. Wheeler. Thank you, Mr. Doyle. I don't know the specific date. We will announce a specific date. I can't free form it here, but obviously there have been multiple challenges with special access that start with a collection of data that was thwarted for years, and we were finally able to begin collecting that data. Insofar as—we will make sure that data is on the record, and on the record in a timely manner. And I share your interest in wanting to make sure that we have an opportunity to address the special access question, but it needs to be fact-based.

Mr. DOYLE. Yes. I mean, can you give us any idea when you anticipate the Commission taking action on the proceeding? Is it

going to be in my lifetime?

Mr. Wheeler. Sir, I hope it is while I am Chairman, and that

that is a shorter period than your lifetime.

Mr. Doyle. Let me ask you another thing. And, like a lot of people on this Committee, and our Ranking Member, Ms. Eshoo, I also have concerns about the trigger for the spectrum reserve in the incentive auction. We have all been working hard to ensure that this auction will enhance competition for wireless broadband, and that consumers will reap the benefits of lower prices and greater innovation. To that end, what is the Commission doing to address the concerns that many of us have about the reserve trigger, particularly in regard to the trigger coming into play so late in the auction?

Mr. WHEELER. Well, let me be sure which trigger you are talking about. Are you triggering the assignment round issue?

Mr. Doyle. No, the reserve.

Mr. Wheeler. The reserve? So the question then becomes, "are you going to cut back on the amount of bidding that goes on for reserve spectrum?" And we have taken the position that you should not. That, first of all, the reserve has been created. That in itself is a huge step, that there are a lot of people on this Committee,

and on the Commission, disagree with.

Then the question becomes, "do you want the auction to function through the whole process, or do you want to truncate it for a quicker trigger for this spectrum, while the other spectrum auction keeps going?" And it seems to me that what that ends up doing is reducing participation in the auction. It probably reduces the prices people will pay, because it means that, here in the reserve you stop, while the bidding keeps going on up here in the unreserved. And I think an auction is something that proceeds to a conclusion, not an auction that gets terminated to favor one party or another. So the establishment of the reserve is a huge point. I think what we should not be doing is picking winners and losers inside that reserve

Mr. DOYLE. Yes. Thank you, Mr. Chairman. I will yield back. Mr. WALDEN. The gentleman yields back. The Chair now recognize the gentleman from Illinois, Mr. Shimkus, for 5 minutes.

Mr. SHIMKUS. Thank you, Mr. Chairman. Welcome. You both agree that, to facilitate rural broadband deployment really is going to take USF reform, is that correct? Would you-

Mr. Wheeler. Yes, sir, we both-

Mr. Shimkus. And Commissioner Pai?

Mr. Pai. Yes, sir.

Mr. Shimkus. And, Commissioner Pai, in your opening statement you mentioned some principles. Can you re-state those real quickly

again for me? I caught a couple of them, but I didn't

Mr. PAI. So with respect to my rural broadband plan, it would be a two-fold plan. First and foremost would be targeted changes to our universal service rules to allow essentially rate-of-return carriers to get universal service support for the costs that they incur for deploying broadband in rural areas. And so currently that support only extends to voice service. I would let them get that support if they offered broadband as a standalone service.

Secondly, creating a voluntary path where rate-of-return carriers could, at their option, get into a similar Connect America Fund that we have for price cap carriers. And obviously the so-called ACAN model in that regard isn't perfect, but nonetheless, if rate of return carriers find it to be preferable, they should be given a

limited window to be able to do that.

Mr. Shimkus. Thank you. Chairman Wheeler, these are all kind of rural questions for rural service, so it is really appealing to the constituary representing about a third of the State of Illinois, so it is like a lot of the rural areas. So this is on this dropped call issue still. I mean, I go to some of my either family-owned phone-

Mr. WHEELER. Yes, sir.

Mr. Shimkus [continuing]. Companies, or the co-ops that I still have out there, and I think we talked about the last couple hear-

Mr. Wheeler. Yes.

Mr. SHIMKUS [continuing]. That we have been with, and the intermediary carriers called the least cost routers, they-

Mr. Wheeler. Right.

Mr. Shimkus [continuing]. Seem to be the problem. Can you tell me how we are going to—because you know these companies. They get blamed if the call gets dropped. It is an intermediary carrier that is doing it, and it causes all sorts of problems.

Mr. Wheeler. Thank you, Congressman. Yes, and you put your finger on—it is the intermediate carrier, and it is the failure on the part of the major carriers to police their subcontractors, if you will. So we have done several things. First of all, there used to be a game that got played where they would give a false ring to pretend the call was being completed, when it really wasn't. We have got a rule in place saying that is out of business.

Secondly is that we have been enforcing this. Within the last few weeks we fined Verizon \$2 million, and required them to do \$3 mil-

lion of additional improvements to stop this, because in 26 rural areas they weren't paying attention to this, which is the heart of the problem. It is this going to what you call the intermediate carriers that they need to be paying attention to.

And thirdly is that we have a data survey out there right now to try and identify exactly what the extent and other causes might be so that we can take additional action, if warranted. But yes, sir, we understand that the call completion is a serious issue, and we want to be all over it.

Mr. Shimkus. Well, that is good, because we are going into the August break, and I know they will have-

Mr. Wheeler. You are going to hear about it.

Mr. Shimkus. They are going to come visit me again during the break, and they are going to ask, and so I am glad I got a chance

to ask the question, and continue to address this issue.

Last question, Commissioner Pai, when it comes to the IP transition, and the ability to upgrade technologies, we kind of talked about that earlier, do all providers face a regulatory level playing field when it comes to making upgrades and provide their customers with the newest technology?

Mr. Pai. Congressman, I don't think they do. I think that some segments of the industry face no barrier to deciding to deploy next generation infrastructure that connects people to digital opportunities. On the other hand, another segment faces antiquated rules that essentially require them to maintain the networks of yesterday, the copper-based TDM networks. And obviously every dollar they have to spend maintaining those networks is by definition a dollar they can't spend deploying fiber that would allow them to compete with others.

And so that is why I have said that, look, if we want to have more broadband competition, let us have a level playing field, regulatorily speaking, in which every single provider has the strongest possible incentive to deploy fiber to the home to compete for that customer's attention.

Mr. Shimkus. Great. And I will just end on—Chairman Wheeler, thank you for your work on 911. I am glad we talked prior, and I look forward to getting together with Ranking Member Eshoo

Mr. Wheeler. Thank you, sir.

Mr. Shimkus. There is always work to be done in this-

Ms. Eshoo. Right.

Mr. SHIMKUS [continuing]. Field, and-

Ms. Eshoo. Would you yield just-

Mr. Shimkus. I would-

Ms. Eshoo [continuing]. For—

Mr. Shimkus. Yes.

Ms. Eshoo [continuing]. Ten seconds? Thank you. I thank the gentleman, and we are going to work together on that. How does the Commission come up with the amount of what a fine is going to be? I mean, in one case it is \$100 million. You just mentioned \$2 million. These are considerable sums, so how do you—do you have a set of rules around that, or-

Mr. Wheeler. For some kinds of issues, such as Lifeline, there is a schedule. For others it is, again, a totality of the circumstances kind of a situation, where you make a judgment call.

Ms. ESHOO. And your department-Mr. Shimkus. My time has expired.

Ms. Eshoo [continuing]. Makes the call?

Mr. Wheeler. Yes, ma'am.

 $Mr.\ Walden.$ Time has expired. Now go to the gentleman from Vermont, Mr. Welch, for 5 minutes.

Mr. WELCH. Thank you very much. I thank both of you for join-

ing us today.

Chairman Wheeler, universal service, a really important issue, and I know that you have been implementing some reforms, and I am asking you to tell us what is the status of that, and what are you doing to make sure at the FCC that public resources are being

responsibly used? And, actually, you can both answer that.

Mr. Wheeler. Thank you, Congressman, because Commissioner Pai and I share the belief that he has been talking about here, insofar as the dichotomy between narrow band and broadband, and that needs to be fixed. I think I go a little further in my approach than Commissioner Pai does. I have developed what I have now started calling the Walden Rule, because—

Mr. WALDEN. Please.

Mr. Wheeler. Because I read the other day that you said, Mr. Chairman, "that USF should spend money where no one else will spend". And that is a core principle. And as this Committee has been telling us so often, you need to review what our rules are.

Mr. Welch. Right.

Mr. Wheeler. The fact that we are spending money to subsidize the telephone company around Disney World, just because we always have, doesn't make a lot of sense. We just had a man in Hawaii go to jail for tax fraud. He is a recipient of rural universal service funds, and it ended up that he was charging his family's education expenses to universal service, and people were having to pay for it. We ought to have some standards for what is in OPEX. We ought to have some standards for what is in CAPEX.

I was just asked the other day to approve a waiver for a universal service trial to a company that could not produce audited financial statements. That is wrong. This isn't my money. This is the people's money. We need to get it out. That is why Commissioner O'Reilly, Commissioner Clyburn, and I are working together on a bipartisan package of reforms for how we are going to deal with making sure that rate of return carriers have what Commissioner Pai I think has called a two track solution, and that is that we have a model that deals with the new broadband realities, and then we have a review of what the standards ought to be for the old system.

Mr. Welch. Right.

Mr. Wheeler. And we are moving down that path.

Mr. Welch. Let me hear a little from Commissioner Pai. Thank

you, Mr. Chairman.

Mr. PAI. Congressman, I think you captured the sentiment perfectly in your opening remarks, when you said that, when it comes to broadband, rural service should be there, and be high quality. And that is exactly why I have proposed this plan, to make sure that, when it comes to rural Americans, we don't leave them on a so-called slow lane when it comes to broadband. We give them the exact same opportunity they would have whether they were in Montpelier or in New York City.

And my concern, however, is that, given the timeframe that we have committed to, which is to get this done by the end of the year,

I think it would be better to embrace the approach that Congressman Cramer, and over 100 other members, including 20 members of this Committee, embrace, which is to have a targeted solution to the standalone broadband problem. I completely agree with the Chairman, there are abuses in the system that need to be corrected, and I stand willing and able to work with him and the other Commissioners to change that, but we can't let the necessary and the perfect be the enemy of the good.

Mr. WELCH. Well, thank you very much. The other thing, Lifeline, my view is that it is a really important program, but there is fraud, there is abuse. And one of the things that happens around here is that, out of frustration, when there is fraud and abuse, sometimes we attack the very existence of the program, rather than reform it. And I think where there is bipartisan agreement is that anything we can do to limit fraud and abuse, obviously, we

want to do. What is the progress on Lifeline?

Mr. WHEELER. Thank you, Mr. Welch. The-Mr. Welch. And that is for both of you.

Mr. Wheeler. We are going to have a rulemaking on Lifeline hopefully before the year is out. It depends on the comments and everything that we receive. And it begins with overhaul. There are two problems with Lifeline. One, it was designed wrong; and two, it was overseen wrong. Other than that, everything is fine. But it

was designed wrong.

I must say, this was put in place by a previous administration, which we have inherited. It is ridiculous to have the people who are benefiting from the receipt of the funds be those certifying that the folks-get them to the right folks. It is ridiculous that you not require those people who are receiving the funds to keep records. On the administration side, it is ridiculous that you not have a database for duplicates. So what we have done, since we came in, 25 percent reduction on expenditures on Lifeline. 20 million people who were inappropriately on it are no longer on it. And \$100 million in penalties.

So we have done what we can to fix the oversight. What this rulemaking is going to do is continue that, and fix the underlying

rule problems.

Mr. Welch. Thank you. My time is up, but I don't know if you

want to let Commissioner Pai add anything?

Mr. WALDEN. He might address the eligibility database. I don't

think we got to that. Commissioner Pai?

Mr. PAI. Congressman, I obviously support the Chairman's vision, at least, of having a more fiscally responsible program. My problem, however, is that we didn't adopt some of the more basic reforms. For example, capping or putting a budget on the program, as every other universal service fund program has. Targeting broadband adoption, which is really the critical issue, we want these funds connecting people who are offline to help them get online. But currently 34 percent of American households, over 40 million households, are eligible for the program. And so if we are going to modernize the program to target broadband, let us make sure we have fiscal responsibility measures in place, and let us make sure we target the help to people who really need it. And that is, I think, an important conversation to have.

Mr. WALDEN. What about the eligibility database? Where are you on that?

Mr. Wheeler. So——

Mr. PAI. Sorry, go ahead. Mr. Wheeler. Go ahead, no.

Mr. PAI. No, after you.

Mr. Wheeler. The duplication database is working quite well. Insofar as the eligibility database, the issue is our ability to get access to data held by state agencies, and we are in the process of working our way through that.

Mr. WALDEN. That is something we need to get done, obviously.

Mr. Wheeler. I agree.

Mr. WALDEN. I will go now to the gentleman from New Jersey,

Mr. Lance, for 5 minutes.

Mr. Lance. Thank you, Mr. Chairman. Commissioner Pai, I want to speak with you about the FCC's recent order regarding TCPA. You stated in your dissent that the attempt to modernize it, "is likely to leave the American consumer, not to mention American enterprise, worse off". Can you elaborate to the Committee how you believe the Commission may not have gotten this correct, and what it should have done to protect the American consumer?

Mr. PAI. Thank you, Congressman, for the question. I begin from the premise that unwanted robocallers are a plague on the American consumer. I don't want to get those calls, I know the Chairman doesn't want to get them. Nobody wants to get them. My problem, however, with the Commission's order is that it takes us in the opposite direction. For one thing, it exempted entire industries from the TCPA. So now, for example, the prison pay phone industry can robocall you. Additionally, it dramatically expanded the range of devices that are now considered to be auto-dialers. So now, if you use your smartphone to make a telephone call, that is technically an auto-dialer, subject to the TCPA.

Similarly, it opened the loopholes for reassigned numbers. There are 37 million numbers that are re-assigned every single year. A lot of legitimate businesses have no reason to know if they have that number in stock, and they have the prior phone number's owner—the consent of that owner—they have no reason to know that that number has been reassigned, unless they can face TCPA liability. Those are the kinds of loopholes that I think are simply going to generate even more litigation, and litigation has already become a flood. There were 14 class actions filed in 2008. Last year alone there were something like 1,918. And so my concern is that we are opening up a lot of these loopholes.

At the same time, we are not cracking down on the really bad actors, which are the unwanted robocallers. For example, we didn't create, contrary to what I would have preferred, a safe harbor for carriers to allow them to develop technology to block foreign robocallers. We didn't take more aggressive enforcement measures, despite the fact that we got 96,000 complaints last year for violations of the Do Not Call registry. In the first 7 months of this year, even though I called for it in January, we have had one citation from the Enforcement Bureau against the Do Not Call registry violators, and that is unacceptable to me.

Mr. LANCE. Why do you think the Commission did not have a safe harbor rule?

Mr. PAI. I am not sure why, to be honest with you. But what I can tell you is that it has created tremendous uncertainty among the host of legitimate businesses that have their consumers' consent, and want to communicate important information. Everyone from restaurants to the Los Angeles Lakers have faced class action lawsuits for trying to communicate with people who have voluntarily communicated with them.

Mr. Lance. Thank you. Chairman?

Mr. Wheeler. Thank you, Mr. Lance. Several things. First of all, let me just go down Commissioner Pai's list. Exemptions, we wanted to make sure that there were opportunities if your doctor, or a hospital, needs to do something because of a medical emergency, or your bank needs to contact you because of fraud, or something like that, that there should be those kinds of exemptions, and they are not big loopholes.

Secondly, you get to make one mistake, and discover that the Lance phone has been transferred. You don't have to do this three, four, or hundreds of times, as some people have. You can say, "excuse me, this is not the number," and just provide notification.

Thirdly, it was the Congress that created the private right of ac-

Thirdly, it was the Congress that created the private right of action, and that is something that is a decision that is out of our hands. But to your key point about the safe harbor and the carrier solution, specifically we address that, because the carriers were saying to us, "we are afraid to offer blocking services, because you might charge us with blocking calls, doing just that," which would be a violation of our rules. And so we amended the rules to say, "no, that is not a violation."

And we now have a workshop coming up where we are bringing the carriers, and other affected parties, in to sit down to say, "OK, exactly how do you do it?" Because how you handle a VOIP call is different from how you handle a TDM call. And how do you put those in place? We have said to the carriers, "our rules now specifically allow you to block calls where you are requested by consumers. Please do."

Mr. Lance. Thank you. Any sur-rebuttal, Commissioner Pai?

Mr. PAI. Congressman, I would simply point out that the safe harbor wasn't given enough granularity, to say the least. And if a carrier is willing to trust an agency that has proven itself to be more than willing to fine a company up to \$100 million for a violation of rules that don't exist, I would urge them not to rely on a safe harbor that doesn't provide much guidance at all.

Mr. WHEELER. You are not encouraging folks not to not black calls? Are we together on the fact that, yes, we want them to be blocking calls?

Mr. PAI. On that we agree, which is precisely why I proposed that the agency create a very detailed, specific guideline for how the safe harbor would operate.

Mr. WHEELER. I don't want to send mixed messages—say, no, we can't do it because there is——

Mr. LANCE. Thank you. My time has expired, and thank you for the rebuttal, the sur-rebuttal, the sur-sur-rebuttal, and the sur-sursur-rebuttal. Mr. PAI. And feel free to call either one of us at home if you would like to follow up.

Mr. Wheeler. That is right.

Mr. WALDEN. I have got a pre-recorded message we will—

Mr. WHEELER. That is right.

Mr. WALDEN [continuing]. Send you. I do think there are issues the Committee will proceed to talk about on this issue, though, as it relates to democracy and——

Mr. LANCE. Thank you, Mr. Chair.

Mr. WALDEN. We will go now to Mr. Loebsack of Iowa for 5 minutes.

Mr. Loebsack. Thank you, Mr. Chair. I really just want to come back to one issue that was already brought up, and have you elaborate a little bit on that, Mr. Wheeler. But before I actually ask that specific question, I always just like to talk about rural broadband, as you might imagine, both of you, and just how important it is for places like Iowa, but not just places like Iowa, just all over the country. And I know we have bipartisan support to make sure that we have rules in place, make sure that we have programs in place, incentives in place, to expand that broadband availability to so many folks around the country.

We know it is an economic development issue. We know it is a health issue when we talk about the spectrum, for example, issue for hospitals, making sure that—I heard from someone this morning about that, making sure that they have the broadband available, and makingsure that they can do what they need to do for

their patients.

We know it is important for education. I often talk about the University of Iowa, how they have a program where they offer AP classes, but it doesn't do any good in those rural areas if those folks cannot access what the University of Iowa offers. And we know that farmers, it is very, very important for farmers to be able to have access to broadband so they can make decisions, obviously, for planting, and for their businesses in general, and on and on and on. I was in Centreville, Iowa for one of my 24 town hall meetings on broadband—small town, and there were 27 people at that meeting on a weekday afternoon at 2:00 in the afternoon because it is just so absolutely critical for them to be able to have this broadband coverage.

So really my question goes back to what I think was already mentioned. You know, earlier this year 115 members, myself included, wrote to you, Chairman Wheeler, urging reform of the portion of the high cost program that supports small rural broadband providers so that they could receive USF support for lines, over which customers opted to purchase only broadband, rather than traditional voice service, as is the current practice. The rural broadband industry submitted a data-only broadband reform plan to the FCC in 2013, but the FCC has not yet acted on this plan. Are there issues with the reform plan specifically proposed by the Rural Broadband Industry that prevent the FCC from acting on it as proposed? And if you could just elaborate on that, I would appreciate it.

Mr. Wheeler. Thank you, Congressman. There are something like 114 different carriers in Iowa. You represent the poster child

of the rural challenge for rate of return carriers. And it is outrageous that if you live in rural America you are 30 times more likely not to be able to get broadband as if you live in an urban area.

So there are two components. One is dealing with things through the price cap carriers. And we recently released what will be \$10 billion over 6 years to seven carriers to build their facilities. I love seeing the headlines that pop up across the country that we get in our report that so-and-so carrier announces they are going to spend \$27 million to bring broadband to this area, as a result of our funds.

Then we go to the rate of return carriers. The challenge with rate of return carrier, and how we deal with it, is that the program has been in place for so long, and the circumstances have changed over that period. Now, as I say, I agree strongly with Commissioner Pai that this bifurcation between narrow band and broadband doesn't make any sense, but we have got to do better than just slapping that Band-Aid on. We have to be saying, "how do we make sure that we can bring this whole program forward?"

So we sat down with the rural carriers to say, "how can we do that?" And to try and reach a consensus, because there are a couple of rural carrier associations who don't agree with themselves, as you know, how do you do that? It is encouraging. Everybody has agreed on this two prong process that I laid out a minute ago. And I am optimistic that Commissioner O'Reilly, and Commissioner Clyburn, and myself, who are all working together with the rural carriers to come up with a package proposal, will be able to get this done, and that we will be able to live up to the commitment that we made over in the other body to have it done by the end of the year.

Mr. LOEBSACK. Thank you. Thank you, Mr. Wheeler. Thank you, Mr. Chair, and I yield back.

Mr. WALDEN. The gentleman yields back. The Chair recognize the gentleman from Kentucky, Mr. Guthrie, for 5 minutes.

Mr. Guthrie. Thank you, Mr. Chairman, and thank you for being here. And my first question is for Commissioner Pai, and it is three parts. I will ask, and if you need it repeated, I can do so as well, but this all flows together. But why do you oppose putting broadcasters in the duplex gap, and why is it important to minimize the number of broadcast stations placed in the wireless portion of the 600 megahertz band after the incentive auction? And I can stop there. I will go ahead and give you the three, and see—maybe you can answer one. Why do you believe it is preferable to put broadcast stations in the uplink portion—or the wireless band, rather than the downlink? And you have suggested that the Commission hold an en banc hearing to discuss issues related to the 600 megahertz plan. Why do you such a hearing would be helpful?

Mr. PAI. Congressman, thanks for the question. I was transcribing as quickly as I could, so if I miss one, please let me know. In terms of putting broadcasters in the duplex gap, one of the things that a typically disparate industry, as the wireless industry, the broadcasters, and unlicensed advocates agree on, is that placing broadcasters in duplex gap would be a terrible idea. Wireless companies don't like it because it would impair downlink spectrum,

which they have told us is more critical for them, in terms of meeting consumer demand. Broadcasters have told us it is not optimal because the duplex gap is the only exclusively reserved spectrum for wireless microphones, which a lot of broadcasters rely on, and unlicensed advocates have told us as well that if you have a full powered broadcaster out there, unlicensed devices will get drowned out. And so that is part of the reason why I have said consistently that we need to do what the record suggests, and that is moving

them somewhere other than the duplex gap.

That raises the question, well, where do you put them? And as between the downlink and the uplink, I don't think there is any question, certainly not in terms of the record itself, that there is tremendous opposition to putting them in downlink. If you think about it, everyone carrying a smartphone around now relies tremendously on downlink spectrum. We are always downloading things from the Internet. So putting a broadcaster in the downlink-first of all, it will impair a lot of the spectrum that is slated to be sold at auction and make it a lot less appealing. Secondly, it will end up causing tremendous problems, in terms of interference between broadcast and wireless.

And here the 700 MHz auction is really a cautionary tale. Think about all the efforts that the Commission had to deal with because we had broadcasters in channel 51, and we had wireless carriers in the adjacent A block of the 700 MHz band. Those issues took a long time to resolve, and it was really challenging. Here we are talking about co-channel, in addition to adjacent channel interference. Plus, remember, this is the last spectrum auction, hopefully, we are going to have in some time with respect to this band, so broadcasters placed in downlink will be there essentially perma-

nently. So this is not a problem we will be able to work around. So that is why I would prefer, based on what I have seen in the record, to place broadcasters, if they have to be put in the wireless band, to be placed in the uplink. Wireless carriers have told us it is technically preferable for a couple of reasons. First, they can minimize the amount of—or they can minimize the problems it would cause, in terms of interference, because you could just simply put a base station filter on. It would be a lot easier, since base stations are smaller in number, fixed in location, as opposed to putting a filter on a mobile device, which everyone is carrying around, and is always moving.

So in terms of the en banc hearing, which I think was your third question, one of the reasons why I think it would be helpful is that the Commission has simply not made available enough data, in terms of the simulations for these clearing scenarios, the data, and the assumptions that underlie those simulations. And we have heard from everybody, from unlicensed advocates, to broadcasters, and wireless carriers, we need more data, and we need to give you

more meaningful input before you make a decision.

And so that is why I thought, let us just bring them all into a room, let us have everybody participate, and so then we, the Commissioners, can have a fully informed discussion before we vote on August 6, or whenever it is, to make sure that the band plan is right. I mean, Congress only gave us one chance to get it right, and if we don't, then I am afraid the cost could be substantial.

Mr. GUTHRIE. OK. I am going to try to get another question in, and for Commissioner Pai as well. So you said hopefully this is the last spectrum auction for a long time, I think you said?

Mr. PAI. With respect to 600 megahertz, yes.

Mr. GUTHRIE. Well, do you believe enough is being done to ensure there is a long term national strategy to make additional spectrum available for commercial use, and if not, what else do you believe should be done?

Mr. PAI. Thanks for the question. I think, consistent with what the Chairman has said, what Congresswoman Matsui and Congresswoman Blackburn have said, we need to make sure that there is more spectrum in the pipeline. I look at, the proliferation of broadband as a consumer, and I think that is a great thing. I look at it as a Commissioner, I wonder, how are we going to supply this spectrum that all these devices connected to the Internet are going to need? And that is part of the reason why I have been so bullish about getting more licensed and unlicensed spectrum out there.

Mr. GUTHRIE. Do you think congressional action is needed?

Mr. PAI. I think in some cases it might be. With respect to Federal users in particular, it would be very helpful. And I know that you and Congresswoman Matsui have been leaders on that, and I thank you for that legislation.

Mr. GUTHRIE. Chairman Wheeler, I only have about 20 some seconds, but to comment on what he was about, the national—more

available spectrum?

Mr. Wheeler. Yes, sir.

Mr. GUTHRIE. May not be enough time.

Mr. Wheeler. Yes, sir, and I would like to identify with what you and Congresswoman Matsui are doing. And, if we get a chance, I would like to also respond to your first question as well.

Mr. GUTHRIE. OK. I only have 9 seconds, so I yield back, sorry.
Mr. WALDEN. The gentleman yields back. The Chair now recognizes the gentled by Mr. Clerks for 5 minutes.

nizes the gentlelady, Ms. Clarke, for 5 minutes.

Ms. CLARKE. Thank you, Mr. Chairman, and I thank our Ranking Member. I, of course, thank our panelists this afternoon for

your updates regarding the agency's activities.

I have a few concerns that I would like to have you address, and one of them worries me a bit, and it is what is not in your testimony, it is how the Commission will address continuing challenges in diversity and representation in the media and telecom industries. We are in the 21st century. We look at our nation, and its diversity, and I think there is a widespread acknowledgement that what we see, in terms of industry, is really just not reflective of who we are as a country.

So I would like to ask, first of all, Chairman Wheeler, where is the Commission's focus on the completion of the diversity studies, and how can this data be used to create more nuanced and tailored policies and reforms that advance equity and inclusion? And second to that is what metrics and accountability structures are in place to ensure that vulnerable populations and their communities will be adequately served through these proposals?

Mr. Wheeler. Thank you very much, Ms. Clarke. The media report that I had promised to the Committee by the middle of next year will include a topic on diversity. It has, frankly, been an issue

that has caught up previous reports. I think that there are a couple of things we can take up. There is a substantial increase in the number of broadcast licensees since I became Chairman, minority broadcast licensees in large part, because of what we did on the JSA rules. Those rules were being used to keep opportunity away

from minority entrepreneurs and I am proud of that effort.

Secondly I think we all have to recognize, as a point that Mr. Latta was raising previously, the importance of how the television business is changing, and the opportunity that is reflected by over the top providers. There has been a difference up here on whether we ought to do what this Committee did for direct broadcast satellite for over the top. And that is to say that you can't hold content back. You can't have various leverage points, because I think over the top programming creates incredible new opportunities for minorities.

And lastly, we have been talking a lot about the designated entity rules and the wireless auction. I feel strongly that what this Congress asked us to do was to create opportunities for minorities, women, and rural individuals to participate in wireless. That is what we did in the DE rules. The suggestions that have been made by my colleagues on the Republican side actually would have limited the ability for real live DEs, rather than hypothetical DEs, to participate.

Ms. Clarke. So on the subject of DEs, and Commissioner Pai, excuse me, I will have you respond as well. It appears that we have probably cracked the code of only one part of supporting small businesses, gained access to capital to enable to compete in the wireless industry. How can the Commission facilitate more secondary market transactions for DEs and other small businesses, especially those owned by women and minorities, with the private sector?

Mr. Wheeler. Were you addressing that to him? So I think that we need to make sure that—again, the JSA rule was very helpful in that regard, and has performed as expected. We have made it clear that when broadcast licensees come in for transfers, and they are complying with the rule which says that they can't now have control of multiple licensees in a market, that we will look favorably upon them selling those assets to minority entrepreneurs. And, in fact, that has been successful.

Ms. CLARKE. Thank you, Chairman. Commissioner, I have run out of time, but hopefully we can get a response from you as well. Thank you.

Mr. PAI. Right now, or for the record, or—whichever.

Mr. WALDEN. Probably for the record, because I want to keep moving forward, I think.

Mr. Pai. OK.

Mr. WALDEN. Mr. Olson from Texas, you are recognized for 5 minutes.

Mr. OLSON. I thank the Chair, and welcome Chairman Wheeler and Commissioner Pai. Since I have been on the Energy and Commerce Committee, since 2011, consumer privacy has been a focus of my work for the people of Texas 22. In the 112th and 111th Congress, that work was done on the Commerce, Manufacturing, and Trade Subcommittee because they had jurisdiction over the FTC. But the FCC has grabbed that authority to regulate the broadband

ISPs, taken it from the FTC, and now it is with the FCC, and now it is under this Committee's jurisdiction.

The good news is you haven't lost me. I am still with you. But folks back home want to know why. What was the problem with the FTC and broadband ISPs that forced this change? And a matter of time, would you—Chairman Wheeler 1 minute, and you, Mr. Pai, 1 minute to respond to his comments. Chairman Wheeler, why

was it changed-

Mr. Wheeler. Thank you, Congressman. As you know, the FTC Act, writ large, says that it does not have jurisdiction over common telecommunications carriers—common carriers. And so when we said that ISPs were telecommunications carriers, it triggered that. What your constituents should know, however, is that we work closely with the FTC, their jurisdiction, insofar as its providers. And whatever we do on our privacy proposals, which will be forthcoming in the next few months, we will do our best to harmonize so that there is a common set of concepts that govern privacy.

Mr. Olson. OK, great. That gave me some time back. Mr. Pai,

you response, Mr. Pai.

Mr. PAI. Congressman, unfortunately, the FCC's reclassification of Internet Service Providers as common carriers had a two-fold hit on consumers. First, it deprived the FTC of jurisdiction, as the Chairman has pointed out, because of the common carrier exemption, jurisdiction that the FTC has explicitly been given congressional authorization for under things like COPPA.

Secondly, because the FCC then arrogated that issue for itself, unfortunately, our authority under the statute is relatively circumscribed. As you pointed out, Section 222, CPNI is a pretty narrow, arcane piece of the privacy puzzle, if you will. So we don't ac-

tually have any rules in place.

And, moreover, the guidance, so-called, that we have given out has been completely unhelpful. For example, in May of this year, our Enforcement Bureau put out a guidance with respect to privacy and it said, and I quote, "The Enforcement Bureau intends that broadband providers should employ effective privacy protections in line with the core tenets of basic privacy protections." What does that mean? I have no idea, ISPs have no idea, consumers have no idea.

Mr. Olson. I have no idea.

Mr. PAI. And so I would rather have let the experts of the FTC, who have protected consumers lo these many years, handle this issue based on law that you have given them.

Mr. OLSON. And so you believe it is important that the FTC has expertise to handle these issues, as opposed to the FCC, correct?

Mr. PAI. Expertise and legal authority, yes.

Mr. OLSON. OK. And the Chairman talked aboutanother issue, about privacy and edge providers. Chairman Wheeler, a consumer interest group filed a petition asking you to start a rulemaking to oppose consumer privacy protections on edge providers. When are we going to see your response? Do you believe that edge providers should have a different standard protection than ISPs?

Mr. WHEELER. Thank you very much, Congressman. First of all, the Commission has, for decades, been enforcing privacy under the CPNI rules on telecommunications carriers. So it is not as though we fell into this patch. There is a long history of privacy protection

regarding telecommunications carriers.

Insofar as extending our jurisdiction to the edge providers, I have said repeatedly that that is not our intention. I don't know when the specific response to that specific petition will be coming out. I will be happy to get you a date. I don't know what the planning process on it is.

Mr. Olson. OK, thank you. Commissioner Pai, your response?

Mr. PAI. I think this is part of the problem. When the FCC crossed this Rubicon on February. If you believe, as the majority did at the time, that the Internet is a virtuous cycle, and you have Internet Service Providers and edge providers acting with one another to provide a better consumer experience, it would seem to follow logically, then, that if an edge provider is acting in an anticompetitive or anti-consumer way, then why shouldn't the FCC have the jurisdiction to extend those same rules to edge providers.

And, moreover, if you look at the Internet conduct standard, it is not clear to me, a priori, why the FCC should limit its focus on Internet Service Providers. You could easily see a dominant edge provider engaging in anti-competitive conduct. And so that is part of the uncertainty that, unfortunately, the FCC opened up, and I hope we don't follow that to its logical conclusion.

Mr. Olson. Well, thank you both. I yield back the balance of my

time.

Mr. WALDEN. The gentleman yields back the balance of his time. The Chair recognizes the gentleman from Illinois, Mr. Rush, for 5 minutes.

Mr. Rush. I want to thank you, Mr. Chairman, and I want to thank you and the Ranking Member for today's hearing. Mr. Chairman, Commissioner Pai, I welcome both of you to today's hearing.

So good to see you once again.

Mr. Chairman, I want to lift up one of the most troubling and egregious matters that is under the consideration of the FCC. And I am referring to the prison phone call rates. I understand that FCC is poised to make a ruling on in-state phone rates for prison phone calls. That said, Mr. Chairman, we must stop this immoral practice of avaricious greed and unabashed exploitation of the poor,

the very ones least able to afford this phone rate robbery.

Additionally, Mr. Chairman, once and for all we must do away with the practice of site commission kickbacks, and we must cap in-state phone rates. As you know, Mr. Chairman, the prison call industry is a multi-billion dollar business. And if there is any doubt, I want to call your attention to a recent Huffington Post article entitled "Prisoners Pay Millions to Call Loved Ones Every Year. Now This Company Wants Even More". And this article referenced how Securus—a company called Securus, the 7th largest company in the prison phone call rate industry, Securus bragged to its investors about its \$404.6 million future profits on the backs of the very same poor.

Mr. Chairman, as you know, I have been fighting this issue for over a decade, and it is now time for the FCC to take action, and rein in these predatory practices by capping the rate at five cents per minute, and eliminating all ancillary fees. But more importantly, Mr. Chairman, the FCC must also be a step ahead of these predatory companies that are right now trying to circumvent the laws by offering video phone calls at the same predatory rates that they offer for telephone calls.

Mr. Chairman, my question is, when will the FCC rule on this

legalized telephonic terrorism?

Mr. Wheeler. Thank you very much, Mr. Rush. I agree, this is a very serious issue, and people across America owe a huge debt of gratitude to Commissioner Clyburn—this issue that had been sitting on the desk of the FCC for 10 years, since Martha Wright filed her first petition and brought it forward, so that there was a decision about inter-state.

But you know what happens, is that whack-a-mole starts getting played here. OK, we can't do it here, so we will move it over here. Well, next month we have a decision on that, on intra-state, that we are doing next month. The point that you make about video phones is another legitimate point. The reality here is that what we are talking about is a monopoly that is granted to prisons to determine how people communicate. And like any monopoly, it ends up being exploitive. And the people who are hurt by that exploitation are the very people who rely on it. And I can assure you, sir, that Commissioner Clyburn keeps our feet to the fire on this, and that I am fully supportive of her efforts.

Mr. Rush. That is good news, Mr. Chairman, and I am just apoplectic about this situation. And I don't know—well, let me move

on. If I have—my time is up.

Mr. WALDEN. Time has expired. Yes, I should tell you, we are going to do a second round of questions, so if you are here for that, there will be more time. We will now go to the gentleman from Florida, Mr. Bilirakis, for 5 minutes.

Mr. BILIRAKIS. Thank you, Mr. Chairman, I appreciate it. Thanks to both of you for showing up today, and thank you for your testi-

mony.

Chairman Wheeler, in March we discussed public safety interference complaint responses, and a resulting quarterly report, which you thought was a good idea. I know you have provided some information. Have you posted what you provided the Committee on the Web site so the public can see what is going on, and what you are doing?

Mr. WHEELER. Sure.

Mr. BILIRAKIS. You have?

Mr. Wheeler. No, I am saying—would we, or—

Mr. BILIRAKIS. Have you posted online-

Mr. WHEELER. I can't answer that question specifically, sir. I will get you the answer—

Mr. BILIRAKIS. Can you get that information—

Mr. Wheeler. Sure.

Mr. BILIRAKIS [continuing]. To us as soon as possible?

Mr. Wheeler. Yes, sir.

Mr. BILIRAKIS. Yes. And if you haven't, I mean, can you post that online as soon as possible?

Mr. Wheeler. I think that is a good point, sir.

Mr. BILIRAKIS. OK, very good. Commissioner Pai, there has been a lot of attention and concern regarding the designated entity auc-

tion rules. Do you believe there are now correctly—are they now correctly balanced, and if not, what should be done to fix them?

Mr. PAI. Unfortunately, Congressman, I don't think they are. In fact, the agency has moved in the opposite direction. My principle for this small business program is that it should benefit small businesses. But, unfortunately, the agency, having loosened some of the restrictions that were imposed on a bipartisan basis several years ago, has now opened the door for large corporations to abuse the program and, ironically enough, squeeze out a lot of the small businesses, minorities, women, and others, who need access to capital

in order to provide facilities-based service.

And we saw that in the most recent AWS-3 auction, where small carriers tried to compete, but they weren't able to because the deep-pocketed Fortune 500 corporation used shell companies to prevent them from bidding. And that is part of the reason why I proposed what I thought were pretty common sense reforms. If you are making in the upper eight figures, you don't need a taxpayerfunded discount in order to participate in a spectrum auction. If you are a genuine small business, with less than \$15 million of revenue, you don't need more than \$50 million of taxpayer-funded bidding credits in order to get spectrum at an auction. If you are a genuine business, you should be able to provide facilities-based service, not simply flip your spectrum to a large incumbent corporation the minute the auction is over.

Unfortunately, they fell one vote short, all of those proposals, which would, I submit, have restored public faith in the small busi-

ness program.

Mr. BILIRAKIS. Thank you. Chairman Wheeler, in the open Internet order you committed to take steps to prevent increases in poll attachment rates that might result from reclassifying broadband. What steps have you taken since the order to prevent such increases, and what additional steps are expected, sir?

Mr. WHEELER. Thank you, Congressman. There is a proceeding underway to do that that we started in the last 6 weeks, 8 weeks, somewhere like that. It is designed to make sure that there is parity between telecommunications service and cable service attachment fees.

Mr. BILIRAKIS. OK. Again, can you continue to update us on this?

Mr. Wheeler. Yes, sir.

Mr. BILIRAKIS. Appreciate it very much. All right, Mr. Chairman, I yield back.

Mr. WALDEN. OK. Yes. So now we will go to-Mr. Johnson is

Mr. JOHNSON. Thank you.

Mr. Walden [continuing]. For 5 minutes.

Mr. JOHNSON. Thank you, Mr. Chairman. Chairman Wheeler, in a recent response to questions for the record as to whether you think stakeholders who cannot afford to have regulatory lawyers or lobbyists in Washington, D.C. should also have the same access that other stakeholders have, you made a point that the Commission does not have funding for routine field hearings, and similar activities, yet your emissary, Ms. Sone, has been routinely traveling to various events. In fact, it seems that both you and Ms. Sone have been wheels up quite frequently in your travels. So let me pose the question this way. Given that you apparently have a robust travel budget, isn't the real issue how you elect to spend the

money?

Mr. WHEELER. Thank you, Congressman. I think the people who I keep turning down, saying "no, I am not going to come talk," would probably disagree. My travel is significantly less than other members of the Commission but your point is a well taken point, and that is that decisions get made. There is a travel budget that each Commissioner has, and that is for his or her discretion. There is not-

Mr. JOHNSON. OK. Well, you have answered my question. It really is up to your discretion on how you spend the money. So could you let us know, for the record, how much the FCC has spent on travel in fiscal year 2013, 2014, and 2015 so far?

Mr. Wheeler. By-

Mr. JOHNSON. Could you-

Mr. Wheeler. By Commissioner?

Mr. JOHNSON [continuing]. Get that back?

Mr. Wheeler. By Commissioner? Mr. Johnson. Yes. Mr. Wheeler. Yes, sure.

Mr. JOHNSON. OK, great. I would like to see that. Commissioner Pai, I was listening closely to your discussion with my colleague, Mr. Bilirakis, regarding the designated entity program, and I am really struggling a bit with Chairman Wheeler's decision to eliminate the attributable material relationship rule, and the facilities requirement in the competitive bidding rules for a couple of reasons, and you pointed those out. You made a compelling case that this sets the state for arbitrage.

So how are we going to prevent that from happening? What actions does the Commission need to take to make sure that these rural small carriers are able to get the credits that the Designated Entity Program was designed to give them so that they can serve

those underserved, unserved areas?

Mr. Pai. Thanks for the question, Congressman. I think, to be honest, we first need to return to the status quo, before the most recent decision, and we need to adopt some common sense reforms to make sure that large corporations don't game the system again.

And to be sure the order did take some of these measures, prohibiting a single corporation from using multiple bidders in the same market and the same auction, but, that is low hanging fruit that is already prohibited by the criminal anti-trust laws. I am talking about genuine reforms of the DE Program to make sure that the people who need the help, the people who want to serve folks in Ohio, or Kansas, can be able to do that.

And I have proposed some of those reforms, such as limiting the amount of bidding credits people can get, making sure that large companies can't own a majority of a DE, making sure that we preserve that AMR, as it is known, so that people don't end up flipping all of the spectrum to the entrenched incumbents, those are the kinds of common sense reforms that don't have a partisan affiliation to them. And I wish the majority had agreed with me.

Mr. JOHNSON. Yes. Well, I can tell you that it is a real concern for me, and I am sure for other colleagues that represent rural areas of the country. I have got high school students that don't have access to broadband Internet service, and, as a result, they either have to go to a public library nearby, or some other location, maybe to where they can get a wireless signal or something like that, to do their homework, to do research, to do that kind of thing.

And this is 2015, for crying out loud.

Mr. PAI. If I could just add a coda, one of the reasons why the facilities-based requirement is so important is because in a lot of cases the larger providers don't see the business case in building out to that school, or to that area, whereas a smaller rural provider, who actually does want to connect those folks to the Internet wirelessly, they have a strong incentive to make sure that those folks are connected. So when those rural providers are squeezed out, because there is no more facilities-based requirement, and speculators can come in and take the spectrum and flip it to the big incumbents, that really does impact those consumers.

Mr. JOHNSON. OK. All right. Well, thank you. Mr. Chairman, I

vield back.

Mr. WALDEN. Thank you. And now we go to the gentleman from

Missouri, Mr. Long, for 5 minutes.

Mr. Long. Thank you, Mr. Chairman, and thank you all for being here today. Chairman Wheeler, on July 24, 4 days ago, your agency announced that—granted with conditions approval of the transfer of control licenses and authorizations from DirecTV to AT&T. We hear much about your agency's 180 day shot clock for reviewing such transfers, yet your agency's conditional grant of approval took over twice that amount of time, as you are well aware, over 400 days. I have got some questions that I would like to have answers to. Number one, what is the point of the shot clock?

Mr. Wheeler. Well, the shot clock is aspirational, to begin with, but it is something that we try to manage to. The difficulty in this particular situation was that we were hung up by a court proceeding and a court Decision that itself took as long as the shot clock. And that specifically dealt with the kind of information that we could have on the public record. We had to get through that be-

fore we could get through the decision.

Mr. Long. Well, on the 170th day of the 180 shot clock your agency stopped it for 3 months. What—

Mr. Wheeler. Because of the court Decision. We had—

Mr. Long. That was the same thing you are talking about, the court—

Mr. Wheeler. Yes.

Mr. Long [continuing]. Decision?

Mr. Wheeler. So the reality here is that there is right now, pending before Commissioner Pai and me—have you—yet? I mean, that is not a set up question. I don't know the answer to it.

Mr. PAI. On what? I am sorry.

Mr. Wheeler. On the protective order.

Mr. PAI. I just saw it yesterday, so-

Mr. WHEELER. OK. So we have put out an order to outline how you protect confidential information so that we can be in compliance with the court so that this will not happen again. And the absence of that was what held up this proceedings.

Mr. LONG. OK. Commissioner Pai, same question to you. Do you have the same opinion on why the shot clock was stopped at the

170th day, or what the benefit of the shot clock is?

Mr. PAI. Congressman, I do have a different view. The agency inflicted a wound on itself, which is why the court had to intervene. The court didn't simply, out of whole cloth, decide to participate in this proceeding. What happened was, in the context of that transaction and another transaction, the agency decided to try to get all kinds of confidential information from programmers and—without any kind of due process. And so the programmers naturally sued.

I urged the agency to try to reach a settlement, because this information wasn't really necessary to resolution of the issues in the transaction, and a unanimous D.C. Circuit Court of Appeals agreed with me, calling the FCC's decision an unexplained and substantial departure from previous policy. And miraculously, even though they remanded it and told the FCC, look, here is the road map you need to follow if you want this information, despite having said the information was critical, ultimately the agency didn't even seek it or rely on it in making the decision. So that is why I said, look, the shot clock needs to be more than aspirational, it needs to be a rule. Just as there are 24 seconds in the NBA, there should be 180 days, period, for the FCC, with extensions for extenuating circumstances. But, nonetheless, we need to give both the public and the parties a lot of certainty as to how the FCC is going to do—

Mr. Long. OK. Let me move on. I have got another question here for Chairman Wheeler. 3 days prior to your agency's conditional grant of approval of the transfer, control of license and authorization from DirecTV and AT&T, the Department of Justice announced that, after an extensive investigation, it concluded that the combination of AT&T's land-based Internet video business with DirecTV's satellite-based video business does not pose a significant

risk to competition.

Although the Justice Department closed its investigation without imposing any conditions on the transaction, your agency announced that it was imposing a number of conditions to address potential harms presented by the combination of AT&T and DirecTV, despite the Justice Department's view that the combination of the two video businesses did not pose a significant risk to competition. What significant risks to competition did your agency identify that the Justice Department apparently missed?

Mr. Wheeler. Thank you, Congressman, and we worked closely with the Justice Department on this, and I don't think that there

was a sliver of light between us. The reality—

Mr. Long. And how can—

Mr. Wheeler. The reality——

Mr. Long. How can you say that—

Mr. Wheeler. Because we have a different test. We have—

Mr. Long. You have a what?

Mr. Wheeler. We have a different test. They have an anti-trust test that they face. We have a public interest test that we are supposed to measure by. So we have actually two different standards that we measure to. And what was happening here was that in about 25 percent of AT&T's service area, DirecTV was a competitor to AT&T for video service. And so eliminating that competition, the

question became, "does that create an incentive, then, to eliminate

broadband competition as well?

So what we required was that AT&T expand its broadband coverage, which increased competition for broadband by a significant amount, and created an opportunity for those video providers not to have to go through an increasingly decreasing—increasingly—a decreasing choke point-

Mr. Long. You just wanted to see if I was paying attention.

Mr. Wheeler [continuing]. Insofar as-

Mr. Long. We have got a red light on our backboard. My 5 minute shot clock has expired, so I will be back for round two.

Mr. Wheeler. Good.

Mr. Long. The Chair now recognizes the gentleman from New York, Mr. Collins.

Mr. COLLINS. Thank you, Mr. Chairman. Mr. Wheeler, the big issue that I have been involved in is pirate radio, which you may know. And back in early June pretty much every New York member of Congress, as well as-

Mr. Wheeler. Yes, sir.

Mr. Collins [continuing]. New Jersey sent you a letter. And while the issue may not be a terrible issue, in some parts of the country, it truly is in New York City, as evidenced by-not often can you get 27 members of New York to agree. Upstate and downstate, we are like two different worlds. So to sum it up, we are extraordinarily disappointed that the FCC has clearly said it

is not a priority. We just got the letter from you yesterday.

And I understand budget concerns, and the point I want to emphasize is this is an issue, even though it is not to you, and you are the Chairman. We really don't appreciate you saying that—as you put in here, the time and expense of pursuing these cases present particular difficulties in the current flat budget environment, where the Commission's staffing is at its lowest point in 30 years. Overtime is less available, so, accordingly, we must prioritize our work based on existing resources and harm to the public. Thus, matters posing an imminent threat to public safety, or directly harming large numbers of consumers, must take precedence over other matters, such as pirate radio.

So, I understand what you are saying, but what is the size of

your budget?

Mr. Wheeler. So that letter, and those particular words which I wrote were not designed to say that this is a low priority, but designed to say that first issue is public safety. Pirate radio has to exist inside that, and I believe that we have been very aggressive. During my Chairmanship, we have had 200 private radio enforcements. In the last year we have had 100 alone. And-

Mr. Collins. How many in New York, just-

Mr. Wheeler. I don't know the exact number, but I would say maybe not-80 percent of those. And so what we have done is, and Commissioner O'Reilly, when he was meeting with the New York broadcasters, really focused on that, and he helped us focus on that. So we formed an inter-agency task force, to work with the NAB and the New York broadcasters on this issue to make sureMr. COLLINS. Well, so you had that meeting, and the fourth point on that that came out was basically that you need more folks in your local enforcement office. That point number four of that hearing was additional FCC enforcement options.

Mr. Wheeler. That was one—right, that was one of the things

that they—

Mr. COLLINS. But in another hearing we talked about how you have been reducing the local field offices, and pulling those folks back to headquarters. And some of us would presume that is to be ready to enforce Title 2, which we can disagree on as well. But it seems a little disingenuous, and our big concern is words are words, actions are actions, and the actions have not convinced me, and I think other members, that it is at all a priority. Your letter, while it said maybe someday, if we have got nothing else to do, we will see what we might want to find in pirate radio, that is—it is a low priority for the FCC.

Mr. Wheeler. If that is how you interpret it, I apologize, because that is not what was meant. So the New York office, the Boston office, and the Miami office, which is where pirate radio tends to exist—those three areas. This is a whack-a-mole—I keep using the whack-a-mole today, but this is a whack-a-mole kind of situa-

tion----

Mr. Collins. Well, sure, that is what pirate radio is. They—

Mr. Wheeler [continuing]. Where people keep——

Mr. Collins. Absolutely.

Mr. Wheeler [continuing]. Moving around. So one of the things I think that I encouraged in that letter is that Congress can also be helpful, because we can go and shut somebody down, and he or she moves to this spot, boom, they are up again.

Mr. Collins. Right.

Mr. Wheeler. And we are just constantly chasing. If Congress could also enact—make it illegal to aid and abet the carrying out of this—and I think that is also what the NAB group has recommended. If we can get at those who are aiding and abetting—because there is a cabal that pulls this off, right? Well, he moved to my apartment over here, you move to this space over here. We didn't know anything about this. And so there is a totality of the package here. I mean, 200 enforcements. We have a task force working on it. We could use some additional authority so we could have some teeth.

Mr. COLLINS. I am about out of time, so two things. One is, maybe this is a rhetorical question, but I will ask it. There have been suggestions that the FCC has actually directed field offices to step down and back away from enforcement. Any truth in that?

Mr. Wheeler. I have heard that—

Mr. Collins. Right.

Mr. Wheeler [continuing]. Suggestion. I have not—

Mr. COLLINS. So I am going to put it right out here.

Mr. WHEELER. I have heard that suggestion. I have not seen that command.

Mr. Collins. And it did not come from you?

Mr. Wheeler. Did not come from me.

Mr. COLLINS. Could you provide me the language that you might suggest? Because I can appreciate—don't bring me a problem with-

out a solution. Can you bring me the language that we might put in—

Mr. Wheeler. Great.

Mr. COLLINS [continuing]. To some other legislation that would assist you on the pirate radio?

Mr. WHEELER. Thank you, sir.

Mr. COLLINS. It is an important issue for us in New York, and we just don't want to be the last thing on Friday afternoon at 4:59, somebody said I have 1 minute until I go home, let me see what I can do on pirate—

Mr. Wheeler. Yes, sir.

Mr. Collins [continuing]. Radio. Thank you.

Mr. WHEELER. Thank you. Mr. COLLINS. I yield back.

Mr. WALDEN. The gentleman yields back. The Chair now recog-

nizes the gentleman from North Dakota, Mr. Cramer.

Mr. Cramer. Thank the Chairman, and the Ranking Member, once again for suffering along with me as you wait for the last questioner. And thanks to both of you as well. And thank you, Commissioner Pai, for referencing the letter that 114 of my closest friends and I sent to the Chairman and to the FCC regarding standalone, and to both of you for addressing it so thoroughly today. And I might just hone in a little bit on some of the finer points regarding the timeline. Because in the letter I received, Mr. Chairman, from you yesterday you often referred to a lack of consensus. There seems to be some consensus. You pledged that by the end of the year we will solve this, but we need more consensus from stakeholders. As you both know, of course, the community presented a plan in 2013, modified somewhat over the last couple of years to meet moving targets.

I might ask you, Commissioner Pai, you have offered up I think your quote there from your plan was simple amendments to existing rules as an outcome. And one of the things I have noticed around here, and I have certainly noticed in regulatory bodies, having served on one, we can tend to complicate simple things. My goal is usually the opposite of that. Are there issues in the plan that prevent this from going forward, or prevent us from utilizing that as the model, or are there other issues that have caused this

to take so long?

Mr. PAI. Thanks for the question, Congressman, and thank you also for your kind words about my proposal, which in turn is modeled on your letter. Stepping back 60,000 feet, I think the problem is basically this. There are a number of problems with the high cost fund, A, B, C, D, E. Problem A, however, is standalone broadband service, and my position has been consistent with your letter, and a companion letter in the Senate: let us adopt targeted changes to our rules to make sure that rate of return carriers aren't penalized for offering broadband as a standalone service. Now, that is not to say that problems B, C, D, E aren't important, but, for the purposes of this issue, standalone broadband service, let us get that piece of it done, and then turn to the other issues.

Now as to the issue with the rate of return carriers and the consensus, I appreciate the efforts of my colleagues to try to find that consensus, but nonetheless, number one, it is not necessary to re-

solve those issues, to adopt a standalone broadband solution, and number two, if we end up waiting until a consensus emerges on those other issues, I fear we are not going to meet the deadline we set for ourselves publicly of getting this done by the end of the year.

Mr. Cramer. Chairman Wheeler, can we meet the end of the year deadline? Is there a reason we can't meet that, and are we attaching too many other things to the simple solution?

Mr. Wheeler. Those are the two right questions.

Mr. Cramer. Yes.

Mr. Wheeler. I am trying to do that. It is my goal to do it. I expect to do it. A couple of points here. In order to do that, you cannot be wedded to consensus. As you know from your previous term, at some point in time you have got to pull up and shoot.

Mr. Cramer. Indeed.

Mr. Wheeler. Boy, am I trying to get consensus. But if you can't get everybody to agree at some point in time, we will put forward a proposal on that in a timely basis in order to do things by the end of the year. Because, at the root of this, is that we have got to do better for rural consumers, period. And it is not just one simple fix. It is a broader set of fixes. Because I am in violent agreement on the narrow band/broadband issue, but it is not enough.

And then we also have a responsibility to those people who are paying for this every month in their phone bills, to make sure that the money is spent responsibly. And I hope we have consensus. I am working for consensus. But if we can't have consensus, we need

to have progress.

Mr. Cramer. Well, there are other issues the FCC has taken up this year that I wish there would have been more consensus on, so I don't want consensus to mean 100 percent, as you might imagine.

Shifting, then, just a little bit with my remaining time, we spent some time talking about, of course, the auction. I was about to call it the voluntary auction. That is what it used to be called. I think it still is. The word voluntary is how it is often referred to, because, of course, it is, in fact, voluntary, both opting in and opting out. And, as you know, the \$1.75 billion that Congress has put in for the repacking fund is probably not going to be enough, considering that we are looking at, what, 1,100, maybe, TV stations that are going to have to involuntarily move.

Is there a plan to deal with that shortfall that I can assure my rural North Dakota broadcasters that they won't have to bear all the costs? Maybe Commissioner Pai first, and then the Chairman

with the remaining time.

Mr. Pai. Congressman, I have long suggested that we should treat the 1.75 billion relocation fund as a budget at the FCC, and structure the auction so as to minimize the possibility that we would exceed it, and ultimately end up putting the onus on the

broadcasters to pay up.

The other issue that I have heard, most recently in Nebraska from a group of broadcasters, is that the 36 months is not necessarily as long as it might seem, that there is a shortage of people who are able to do the work, there is a shortage of the equipment that is necessary for the repacking to be done, and that the Commission should be mindful of that as well as it progresses. So I share your concern, and I want to make sure that broadcasters, to the extent possible, are held harmless, in terms of necessary expenditures.

Mr. Cramer. Chairman, do you want to speak——

Mr. Wheeler. I think Commissioner Pai has identified the key issue, and that is we do need to make sure that we have to live within a budget, and we want to manage things within a budget. You gave us that number. We can't change that number, and we have got to come up with a program that will make it work.

Mr. CRAMER. Thank you both. Thank you, Mr. Chairman.

Mr. WALDEN. And if you hang around, Mr. Cramer, we are going to do a second round. You could be, like, really quick on the shot clock here. We are now going to go to the gentleman from New Mexico, Mr. Luja AE1n, for 5 minutes.

Mr. LUJA AEIN. Mr. Chairman, thank you so much for having us here today. Ranking Member Eshoo, it is an honor to be with—here with both of you. Chairman Wheeler, Commissioner Pai, thank you

for joining us as well.

I appreciate the testimony centered around rural access. As Commissioner Pai said, he is a rural guy, I am a rural guy. I think Chairman Walden also represents a very rural district, as we talk about many parts of the country that need broadband access, and affordability. And you have heard me say this many times, Chairman Wheeler, we can have connectivity at 30,000 feet when we are flying across the United States in an airplane, there is no reason that we cannot have connectivity when we are on the ground traveling all across America, not only in rural communities, tribal communities, and states like mine, in New Mexico.

With that being said, in New Mexico, for example, 77 percent of those living rural communities, and 89 percent living in tribal communities lack access to advanced broadband. Chairman Wheeler, as you said in your testimony, you have pursued an aggressive agenda at the FCC that includes reforming the E-rate Program, modernizing the Lifeline Program, and establishing the Connect America Fund. Can you discuss what this agenda means for people who lack sufficient access to broadband and communication services, not just with buildout, but also with making it more affordable so people are able to take advantage once there is a buildout program?

Mr. Wheeler. Yes, sir. Thank you, Congressman, and I hope that we can do significantly better than the speeds that are delivered in the air, and that is what we are doing. I have been in New Mexico multiple times, in tribal areas, and other very remote areas in New Mexico to personally visit and talk to the individuals in-

volved.

I remember a situation that—there was a fiber going down this side of the road, a fiber on an Indian reservation, and over here, about 100 yards away, was a high school, and up here was the library. And they couldn't get a connection from the fiber to the high school because it was cost-prohibitive, and the E-rate Program wasn't paying for that. Now we pay for that, and that is in large part because of these kinds of specific examples that we have seen. We need to make sure this is the case.

We also need to make sure that low income individuals who are, unfortunately, disproportionately represented on tribal areas have access to broadband support to connect them. And that is why we are not only overhauling, but changing the orientation of the life-

line program to go to broadband.

Mr. LUJA AEIN. And, Chairman Wheeler, in all these areas—I am going to submit some other questions into the record to flesh these areas out, but, as we do this, I really appreciate the conversation that we have had today, and the focus, and seeing how we can grow the rural family as well, and see how we get more attention there.

The other place that I want to complement both of you, Commissioner Pai, Chairman Wheeler, and get your perspective is on modernizing the FCC. You have embarked on expanding electronic filing and distribution, decreasing backlogs, and improving responsiveness to consumers. Can you both tell me what you are doing to provide greater information to consumers, including transparency and accountability, standardizing forms, digitizing the process, including the submittal of documents?

Mr. Wheeler. Boy, am I glad you asked that question.

Mr. Luja AE1N. And you both support that effort?

Mr. Wheeler. The—

Mr. Luja AEin. Yes, Commissioner Pai?

Mr. Pai. Yes.

Mr. Luja AE1N. Yes?

Mr. Wheeler. On my first trip to our consumer operation in Gettysburg, I saw in the corner a humongous machine that the staff proudly announced to me could take 17 different forms and put them into one envelope. And I said, "well, why are we sending out 17 different forms?" And they said, "well, because that is the way we do it." So you contact the FCC on a robocall issue, and we will send you the form for robocall, as well as the form for loudness on commercials, as well as the form for every other kind of complaint we had. And I said, "wait a minute, we can do better than this."

Mr. LUJA AEIN. And those forms are required to be sent back.

Mr. Wheeler. And the——

Mr. Luja AE1N. Those forms——

Mr. Wheeler. And I would talk to consumers who would say, "what am I supposed to do with this? Which form am I supposed to—? So we now have totally updated it and put it on the Web. We just won a prize for being one of the best consumer interface sites on the Web. And most of all, we are then taking that information and putting it back into what should we be doing to help us focus on our priorities.

Mr. Luja AE1N. That is great. Mr. Chairman, if there are other areas that we can work on in this space, I look forward to having those conversations. And if I am able to, because of the length of the line, Mr. Chairman, I look forward to the second round—

Mr. WALDEN. Indeed.

Mr. LUJA AEIN. Thank you, Chairman.

Mr. WALDEN. I don't know if you can get there from here. Which

we are going to start now, so thank you.

I want to go back to this issue of LPTV and translators, and maybe Commissioner Pai—Chairman Wheeler. There is all this

talk now at the Commission about setting aside an entire channel for unlicensed. And I support unlicensed, we have made a lot of unlicensed available, there is more to be done, but won't setting aside a whole channel for unlicensed contribute to the problem that we are hearing from translator and the LPTV community? Commissioner.

Mr. PAI. Mr. Chairman, it will by definition, to the extent that a particular vacant channel is allocated solely for unlicensed. In the TV band, that means an LPTV's station can't occupy it post-auction.

Mr. Wheeler. In——

Mr. WALDEN. Chairman Wheeler?

Mr. Wheeler [continuing]. Reality, probably not, because what we are talking about here are using TV white spaces, and creating these kinds of additional applications for unlicensed in those areas where the duplex gap is not sufficient. And that is going to be a handful of areas that I doubt will be any areas that are the typical LPTV rural kind of area.

Mr. WALDEN. So will you commit to LPTV and translators having priority, then, over unlicensed?

Mr. WHEELER. No. We are going to—so it was really clear—

Mr. WALDEN. In the TV band?

Mr. Wheeler. I think that the mandate from this Committee is clear. The mandate from this Committee is that there is no priority given to LPTV.

Mr. WALDEN. True.

Mr. Wheeler. And the Committee also said, however, that we need to be encouraging unlicensed. I don't think that it comes down to that kind of a solution, though, Mr. Chairman, with all due respect. I think that it is possible, and what we are just breaking our tails on, is to be able to accomplish both of these, and I think we will be successful.

Mr. WALDEN. Yes. I would say—my recollection of the statute, which we together helped write here, was—

Mr. WHEELER. You wrote it.

Mr. WALDEN [continuing]. That unlicensed was never set aside as a priority to go create a nationwide band. In fact, we had a lot of discussion about that very fact, that you don't go clear all this and then give it away to, in effect, some pretty major operators. You know, Commissioner Pai?

Mr. PAI. And this is part of the reason why I suggested that we adopt a technically sound solution to where to put broadcasters if

we put them in the wireless——

Mr. Walden. Right.

Mr. PAI [continuing]. Band. If we put them in the uplink, then we avoid this entire issue altogether, whereas in the duplex gap, we not only impair unlicensed, which has to find a home, but also downlink.

Mr. Wheeler. This is a really good point that Commissioner Pai has raised, that there is serious concern on. So, first of all, let us remember what we are talking about here—how do we minimize the aggregate impact across the country? And that means that in a handful of markets, it is a percentage that can be in single digits, OK, that there is an issue. He is proposing that you put it in the

uplink, put the interference in the uplink. What that does is knock out an entire bay station.

Mr. Walden. Right.

Mr. Wheeler. The impact is much broader.

Mr. Walden. I think you have got disagreement with Commissioner Pai, but I am going to have to move along here. My concern is there are a lot of—I hear from my colleagues all over the west, there are concern these translators are going to go dark because they are going to get squished out. And if they get squished out because you created a whole band of unlicensed, that only adds to the problem. And there is a public interest obligation underpinning all of this at the Commission to provide for.

Now, I realize they are not classy. I realize they don't have all the rights, and all that. I was a licensee of translators myself. I knew I could be pushed out. But through this you have got some flexibility here to manage, and that is, I guess, what we are call-

Mr. Wheeler. Yes, we—

Mr. Walden. I want to switch gears to go to the TCPA issue very quickly, because this issue of auto-dialer has come up. And, in your order, you adopted a pretty broad definition of an auto-dialer, although you acknowledged, and I quote, "there are outer limits of the capacity of equipment to be an auto-dialer, and there must be more than a theoretical potential that the equipment could be modified to satisfy the auto-dialer definition." Is my iPhone an auto-dialer?

Mr. Wheeler. No, sir.

Mr. WALDEN. Then let me ask you this. There are at least three apps that we found, Dial My Calls, Call Bot Automated Calling, and Voxling that would turn my iPhone into an auto-dialer.

Mr. Wheeler. So the issue that we were trying to deal with in this order was not the hardware, but the impact, because since Congress acted in 1991, the technology has changed. And what Congress's instructions to us were is no contact from auto-dialers without—

Mr. Walden. But——

Mr. Wheeler [continuing]. Permission.

Mr. WALDEN. But my—

Mr. Wheeler. I am taking that—

Mr. WALDEN [continuing]. Question to you, though, is if I push somebody's name, Chairman Wheeler's—I don't ever dial your number. I just push——

Mr. WHEELER. Correct.

Mr. WALDEN [continuing]. Chairman Wheeler, and it dials. To me—is that an auto-dialer?

Mr. Wheeler. No, sir.

Mr. WALDEN. OK. If I have a database of names that I want to reach out to, let us say voters, and I want to turn them out to vote, and I have a device that calls until somebody answers, and then I can take the call, is that an auto-dialer?

Mr. Wheeler. Yes, sir.

Mr. WALDEN. OK. So I no longer can do that? If I have a teletown hall in my office, which I do, and there is some company that

does—calls all those thousands of people in my district, are they now prohibited from doing this?

Mr. Wheeler. Unless the consumer has asked to get this. The

statute is very explicit.

Mr. WALDEN. So tele-town halls now by members of Congress, and most members do that, are now against—

Mr. Wheeler. All I am doing is—

Mr. WALDEN. No, I am asking you the question.

Mr. Wheeler [continuing]. The statute. No, sir. That is right.

Mr. WALDEN. So those are prohibited, and your contention is always have been?

Mr. Wheeler. Yes, sir.

Mr. WALDEN. Wow. That is interesting. That would be news to

a lot of people. Commissioner Pai?

Mr. PAI. Mr. Chairman, I think part of the reason why it is indisputable that a smartphone is an auto-dialer under the FCC's new interpretation—if you look at the statute, it says a capacity to randomly or sequentially dial a number. I explicitly said capacity means the actual capacity. The smartphone has, in itself, intrinsically, the ability to do that. The majority rejected my argument and said, no, you could download an app. There are all kinds of other things you could do to effectively make the smartphone an auto-dialer, even if it isn't intrinsically.

And that is part of the reason why literally every communications device, other than a rotary phone, I give the majority credit for excepting those, nonetheless is now subject to TCPA liability as an auto-dialer. And that is not good for consumers, that is not good for providers. It is not good for anybody, other than trial lawyers.

Mr. WALDEN. Well, and we are hearing from others out there who are—there is this issue with the health care exchanges, and whether or not insurance companies can follow up and notify you that it is time for you to come in and have some tests done. I have been told that may be prohibited now. Are you aware of that? Are you hearing those issues?

Mr. PAI. That is the first I have heard of it, but it doesn't surprise me, because now we have seen it from a number of different industries. They are just uncertain about what the rules of the

road are.

Mr. Walden. Yes.

Mr. Wheeler. So understand what we were doing, Mr. Chairman, was responding to a series of petitions. We did not issue a rule. People petitioned us and said, "what is the rule?"—what does your—

Mr. WALDEN. Right, but you interpreted.

Mr. Wheeler. And if somebody wants to petition us on the kinds of things you talk about, we can deal with that.

Mr. WALDEN. Right.

Mr. Wheeler. On the health care issue one, we specifically had an exemption for bank fraud, health care, things like this. And for government agencies.

Mr. WALDEN. And with changing technology, 40 percent of Americans no longer have a land line, right?

Mr. WHEELER. Right.

Mr. WALDEN. I know you spoke out and said, basically, pollsters could go the way of blacksmiths, I guess.

Mr. Wheeler. Well, they have been right.

Mr. WALDEN. Well, I guess my point is—so that industry, in effect, in terms of trying to do a random sample is now put out this-

Mr. Wheeler. But-

- Mr. WALDEN [continuing]. In this effect, right? How do you do a random sample on a poll if you can't randomly sample and dial?
- Mr. Wheeler. So I once sat down with Peter Hart to write a

Mr. Walden. Right.

Mr. Wheeler [continuing]. Exactly on that, insofar as wireless, because you can't get to the wireless numbers.

Mr. WALDEN. Right.

Mr. Wheeler. You don't know what they are. So that went by the board. The issue here is, if you come to us and you say, the statute says, which it does, that the only folks who are allowed to be called are those who want to be called-

Mr. Walden. Got it.

- Mr. Wheeler [continuing]. And I am supposed to be a strict constructionalist of the statute-
- Mr. Walden. Well, we have seen some examples by the Court where they would disagree with your interpretation of statute on other issues

Mr. Wheeler. Let me-

- Mr. WALDEN [continuing]. Rather violently and directly.
- Mr. Wheeler. And you are constantly encouraging me to be a strict constructionalist.
- Mr. WALDEN. Well, I think we are just figuring out the im-

Mr. Wheeler. Yes. I understand.

Mr. WALDEN [continuing]. Of your ruling as it relates to—I have gone way beyond my time, but I will now defer to my colleague from California, Ms. Eshoo.

Ms. Eshoo. Thank you, Mr. Chairman. Well, it is an important discussion, and I think that we need to talk about this some more, because what went into the statute was like holding a mirror up to the country at that time.

Mr. WHEELER. In '91, right? Mr. WALDEN. In '91. That is a long time ago. That is many, many moons ago, when you think of how many generations of technology changes have taken place. So whether someone wants to be a strict constructionist or whatever, I think that we have to have the elasticity to stay up with the times. I mean, each one of us represents 750,000 people. Now, maybe we have got to reach out to every single one of them if we possibly can, but, in my view, meeting with people relative to a telephone town hall meeting has been overwhelmingly embraced. Not just accepted, but embraced by my constituents. Plus it saves tons of money, and they get to just ask whatever they want. So these are, I don't think they would be satisfied—well, this is what the statute says. I think they would say, change whatever you have to change, but keep up with the changes that are taking place. So it is important.

Since we are going into a second round, and maybe it is just the Chairman and myself. No, that is—two others? Good, Billy and Ben. I want to talk about your budget. The House appropriators have really screwed the FCC, in plain English, in my view. And I don't think it is funny, I think it is serious. We had members asking questions today about travel budgets. I think that whatever you do, and however you do it, it would be interesting to see if it tracks along with what—how members of Congress are allowed to handle their MRA. I don't know, but it may be something for us to discuss. Now, the fiscal year appropriations bill has \$315 million in it. That reflects a cut of \$25 million below the fiscal year 2015 enacted level, and \$73 million below the request. Now, they also have placed in riders relative to net neutrality and all of that.

Now, what I would like to ask you, Mr. Chairman, is have you had conversations with the appropriators? Is there anyone from the majority here that has been asked to lean in with the appropriators? I mean, we are constantly putting on the FCC, and in oversight, all of these issues come up. I don't know who is going to do this work and follow up with every member's request about what they want? You wanted to close offices, members said don't close them, we need them open. But, I mean, there are so many things that are reliant on dollars. And I am not talking about having a load of extra dough. I am talking about the agency being able to carry out its responsibilities. So what I would like to know from you is, have you had conversations with the appropriators on the majority side? Have you had conversations with the majority side here to see what can be worked out with the budget?

I don't know, these riders, the President is not going to sign something like that. And at the end of the day, I think that the appropriations process is so messed up around here because we don't have regular order, speaking of transparency, and process, and all of that, that we are going to end up with an omnibus bill. And I think that is what is going to happen. So compare and contrast what your present budget is, because an omnibus doesn't really allow for that much more, and address for us any conversations, or how you are following up with whatthe appropriators did to the budget of your agency.

Mr. Wheeler. Thank you, Congresswoman. We have had conversations with everybody who will listen, and some who won't. And I mean that only in a flippant remark. I am—

Ms. Eshoo. Yes.

Mr. Wheeler [continuing]. Not saying people aren't listening. We have talked to this Committee, we have talked to their Committee. I was honored that the Chairman came to the Appropriations Committee, which I think—the first time that I have ever known that a Chairman has actually come—

Mr. WALDEN. Second time. I was there last year.

Mr. WHEELER. I missed you, then. I was—sorry. Mr. WALDEN. I was right behind you and waving.

Mr. Wheeler. OK. So that he has got a record now for twice.

Ms. Eshoo. But that is not the point.

Mr. Wheeler. But the——

Ms. Eshoo. I want to know about the money.

 $Mr.\ Wheeler.\ But,$ yes, we have to live with the number that the Congress gives us. It is that simple.

Ms. Eshoo. Have you, in response to what the appropriators have done—and I don't know, Mr. Chairman, were you there to support the appropriators in cutting the budget, or against it?

Mr. WALDEN. I was there to listen to the appropriators

Ms. Eshoo. I see.

Mr. WALDEN. Yes.

Ms. Eshoo. You didn't testify?

Mr. WALDEN. No. No. I was there to hear what they had to say. Ms. ESHOO. I see. Have you come up with—you know what I would like to ask you to do? Two things. What you will be able to

Mr. Wheeler. Yes.

Ms. Eshoo [continuing]. With a budget that is reduced by 25 mil-

Mr. Wheeler. Yes, ma'am.

Ms. Eshoo [continuing]. And the top line things that you have to do. We have got to move forward with the voluntary auction, and all the top line items. And also, if we have an omnibus bill, what that does. And I look forward to reviewing that. I think it should be sent to everyone on the-

Mr. WHEELER. Thank you.

Ms. Eshoo [continuing]. Committee.

Mr. Wheeler. We would be-

Ms. Eshoo. I would really like to see that, because——

Mr. Wheeler. Do you mean-

Ms. Eshoo [continuing]. We are walking into something that I think the members of this subcommittee, that have oversight responsibility, are going to have to understand, that we either have to curb our appetite for giving the FCC assignments that—if they don't have the dollars to carry them out, then they don't have the dollars to carry them out. Something has going to go.

Mr. Wheeler. I will tell you one interesting thing. We are currently at the lowest number of full time employees in modern his-

tory for the agency.

Ms. Eshoo. Thank you.

Mr. WALDEN. Thank the gentlelady. Now go to the gentleman from Missouri, Mr. Long.

Mr. Long. I was very impressed that I got to follow the Chairman for the first time-

Mr. WALDEN. You hang around long enough-

Mr. Long. Felt kind of like Sally Field. I thought, they really do like me. Then I looked around and no one else was here, so—Commissioner Pai, I have got a question for you. It has been reported that the Chief of the Enforcement Bureau has acknowledged that many of his cases fall into the legal gray area where companies might not even realize they are doing anything wrong. I know you have raised concerns about this. Can you kind of explain your concerns, and what could be done to address them?

Mr. Pai. Thanks for the question, Congressman. I think, unfortunately, many of the FCC's more high profile enforcement initiatives have betrayed that basic principle of due process, and that is not an FCC law. That is going back to King John signing the Magna Carta 800 years ago this summer at Runnymede. And I think part of the reason why I have been so outspoken about it is that if private actors, from companies all the way to individuals, don't know what the rules of conduct are, then they have no reason to know that their conduct is violating what the FCC thinks should be the rule.

And with respect to certain notices of apparent liability the agency has issued, it is almost more a quest for headlines first, and we will figure out the law later, if at all. But that has it precisely backwards. To me, we should look at the facts, we should look at what the law is. If there is a gap in the law, let us change it to make sure that people are abiding by what we think is proper conduct. But we can't sanction somebody for violating a rule that they have no reason to know, or don't know, exists.

Mr. Long. OK. Thank you. And, Chairman Wheeler and Commissioner Pai, to the two of you, I am curious about the Broadcasters Relocation Fund, and how those monies are going to be spent. The fund is currently at \$1.75 billion, as you know, and obviously that fund was set up to pay for all of the relocation costs to the broadcasters you are required by the FCC to move to a new channel as part of the auction. After examining these issues for the last few years, has the FCC determined how many stations it is able to re-pack with that \$1.75 billion fund?

Mr. Wheeler. Thank you, Congressman. It is a moving target, depending upon the characteristics of who participates in the auction. Do you have to move an antenna? Do you have to build a tall-

er antenna? How far do you have to move it?

Mr. Long. Now, can you give me a ballpark on the number? Mr. Wheeler. I can get back to you with one, sir. I don't have one on the top of my head. But what we have tried to do is to develop a set of rules that can live inside of that, and so let me get you the number we use for denominator in that.

Mr. Long. OK. I would-

Mr. Wheeler. Because I don't know it off the top of my head. Mr. Long [continuing]. Appreciate it. And, Commissioner Pai,

same question to you.

Mr. Pai. I have heard estimates that it will cost somewhere north of \$3 billion to relocate all the broadcasters. And, if that figure is correct, and we only have \$1.75 billion in the relocation fund, then it necessarily follows that broadcasters would be out of pocket for that extra \$11/4 billion. And that is something that I hope to avoid, and certainly I am willing to work with you and the Chairman, and my colleagues, to make sure that doesn't happen.

Mr. Long. Well, do you have any estimate on the number that the \$1.75 billion—that is the number I am trying to get to, how

many that would cover?

Mr. PAI. No, unfortunately, I don't, because, as the Chairman pointed out quite eloquently, there are a lot of moving parts to this,

and every broadcaster is unique.

Mr. LONG. OK. Because I have heard some figures, and I have difficulty believing that \$1.75 billion will cover the estimated number that they are talking about. So if both of you could get back to me on that, I would appreciate it. And I am going to yield back with a minute 37 to go.

 $Mr.\ Walden.$ The gentleman yields back. The Chair recognizes the gentleman from New Mexico, Mr. Luja AE1n.

Mr. LUJA AEIN. Thank you, Chairman Walden, and I would like to associate myself with the questions that both Ranking Member Eshoo and Chairman Walden were asking pertaining to what appears now to be our inability to reach out to the American people to be able to get feedback from them.

Chairman Wheeler, as we talked about these telephone town halls, when I travel the 13th Congressional District of New Mexico, especially in rural communities, one of the things that I hear from members of the community that I represent was sometimes I have to travel 3 or 4 hours just to get to town centers, not even city cen-

ters, is how much they appreciate being able to weigh in.

So if the rule requires them to opt into this program, how would we reach out to seven, 800,000 constituents for them to opt in? We can't sent them an e-mail because, based on a 2015 press release coming from the FCC, only 48 percent of those making less than \$25,000 have broadband service at home. And so if we can't reach out to them to opt in, do I send them a letter, which is what the FCC is working against? You don't want to be sending letters and forms out to opt in, and then you would have to check a box yes or no, and then you get the letter back in. I certainly hope that we can look at this to see how we can address this. And I know it is something that I visited with Chairman Walden, and with Ranking Member Eshoo, with both the majority and minority staffs on this, so I look forward to working with you on that as well.

With that being said, just some additional questions about broadband penetration. There has been a little bit of conversation today about broadband, and, Chairman Pai, do you see broadband penetration or accessibility in rural parts of the country to

broadband as a necessity or a luxury?

Mr. Pai. Well, Congressman, thanks for the question. As I said in response to Congresswoman Eshoo earlier, my goal has been always to make sure that any American anywhere, whether it is on tribal land in New Mexico, or somewhere in my home state of Kansas, anyone who wants digital opportunity, in terms of a broadband connection, should be able to get it. And that is why I have laid out proposals on rural broadband, on e-rate, on wireless infrastructure, on 5 GHz spectrum, to make sure that we have a bunch of competitors out there all competing to provide every American with that opportunity. And as far as the semantic classification of it, that is something that I will leave to wiser minds than myself, but my focus-

Mr. Luja AE1N. But with the semantics associated with the difference between necessity and luxury, how would you characterize the importance of accessibility to broadband in rural parts of the

Mr. PAI. I think it is absolutely critical, and one of the things I have enjoyed in this job is having a chance to travel to small towns, from Diller, Nebraska, to Fort Yukon, Alaska to be able to see how people have used broadband to get opportunities they otherwise wouldn't have. I am sure this is the case in your district, but I have seen it in a lot of rural districts that if people don't get that high speed connection, they will move somewhere else. They will move to another state, or a bigger city to get it. And that is unfortunate, because I think there are a lot of ideas in rural America that are probably withering on the vine for lack of that broadband connection.

Mr. Luja AE1N. Yes.

Mr. PAI. And that is something that I am passionate about, and

I would be more than happy to work with you—

Mr. LUJA AE1N. I appreciate that, yes. Well, I would characterize it as a necessity, not a luxury. I really appreciate you considering it or characterizing it as absolutely critical. I would agree with that assessment as well.

With that, Commissioner Pai, as we look to the Lifeline Program as well—and in the testimony that—or your dissent to the 2015 order, in it there were some concerns associated with the cost to the program to date. And in your dissent you did recognize that there had been some reforms, that we looked back to 2012, understanding that in 2005, 2008, we saw a transformation of Lifeline that went from land line phones to being able to go into mobile phones, and now into smartphone apparatus. Since then, in 2012, the Commission came forward with a unanimous opinion, which resulted in a reduction of \$214 million in savings in 2012, with a substantial projection going into 2014. I am trying to still get the numbers on what those realized savings were as well.

But in your dissent you also listed a concern where there were providers that were signing people up fraudulently, which we need to crack down on, and we share that concern. But in the 2015 order that you dissented, there was a reform in there that did state that we would—that the FCC would remove the ability for providers to

sign people up for Lifeline—or for verification.

Mr. Pai. Yes.

Mr. LUJA AE1N. Is that something that—with that principle, is that something that you agree with, and were there other areas that you disagreed with in the order? But is that something that

you could agree with that we could work on together?

Mr. PAI. Well, I would love to work with you on that, and I do think that verification is a critical issue. I think one of the problems that I cited in my dissent is the fact that fly by night operators, like Icon Telecom in Oklahoma, they just created so-called Lifeline customers out of whole cloth, got a lot of money for doing it, and the CEO ended up pocketing \$20 million, and spent it on his own private expenses. And that is something we need to weed out. We need more enforcement action, we need to reform the rules, and we need to have that conversation about how to have a fiscally responsible program.

Mr. Luja AEIN. And so I appreciate the reforms the Commission has put in place. The last question I have is, is \$1.6 billion the right cap? Because you and I share a concern with broadband availability in communities, but I would hope that we both would agree that it is not just accessibility from an infrastructure perspective to broadband, it is also an affordability question in many rural parts of the country. What is the right number for a cap, and

should it be arbitrary, or should it be based on data?

Mr. PAI. I do believe it should be fact-based, and that is part of the reason why I suggested a cap or a budget of \$1.6 billion, because the program was at \$800 million in 2009. It is now at \$1.6, and that is the only one of the universal service fund programs that isn't capped. And so what I suggested was, we need to have a balance here. We need to make sure that we target the people who are offline in the Lifeline Program.

We also have to make sure that we are responsible stewards of the consumers' tax dollars. After all, this is paid for by consumers, and \$1.6 seemed to me to be a good conversation—a good starting

point to have.

Mr. LUJA AE1N. But \$1.6 is based on last year's numbers. The only data associated there is that is what the number rounds up, and year to year that number changes, understanding that the inflation from 2008 to 2012 was because the reforms were necessarily in place that helped us back that number down with the reforms in 2012, and the recent actions by the FCC in 2015.

So, Mr. Chairman, this is an area maybe where we can work on it together as well, but I look forward to have more conversations

in this space as well. Thank you for the time, Mr. Chairman.

Mr. Walden. Thank you, and we appreciate your participation, and that of our witnesses. And, speaking of outdated data, just in closing, the quadrennial review I referenced in my opening statement is now—I think the last one we got is probably 8 years old, so I hope the Commission will deal with the quadrennial ownership report on a basis as required by statute. AM modernization is still something high on a number of our priorities, and on the de-stack issue, we ask in stellar that the Commission deal with the downloadable security issues, and it appears that Committee was given direction to work disaggregation of data on a video stream. So, again, we are after the downloadable security issue.

I have one letter to put in the record from Care Payment, with-

out objection.

[The information appears at the conclusion of the hearing.]

Mr. WALDEN. And I think you heard, Mr. Chairman, bipartisan concerns here on TCPA. We realize you are implementing the law, it appears a law that was created back in '91, when you got charged for incoming phone calls. Nobody is talking about robocalls here for cell phones. None of us want that. But I think there is an issue here where we need to take a look at that law.

So, with that, thank you for your diligence, and your patience,

and with that, subcommittee stands adjourned.

[Whereupon, at 1:15 p.m. the subcommittee was adjourned.] [Material submitted for inclusion in the record follows:]

PREPARED STATEMENT OF HON. FRED UPTON

With communications and technology issues touching nearly every part of our 21st century economy, these sectors need a fair, consistent, and transparent regulator. I think it's a good sign when we're having a healthy debate about the tough questions before the commission—it means the system is working. On the other hand, recent breakdowns in collegiality and last-minute data dumps into the record erode and needlessly distract from the commission's important work.

A number of significant decisions were considered in the past year, and even more are on the horizon. For example, there is substantial work that must be completed before the incentive auction can take place. Proposals about the auction, such as the proposed duplex gap, have raised concerns among all participants that, without ap-

propriate resolution, could threaten the auction's success.

Real reforms, including a funding cap, must be made to the Universal Service Fund to ensure ratepayer dollars are spent wisely and the program is sustainable for years to come. Additionally, the chairman's plan to start a rulemaking on the commission's privacy authority under the new net neutrality rules represents fertile ground for the temptation of agency overreach—a temptation that must be resisted. How the commission addresses these issues will tell us whether real progress is obtainable.

As we continue our oversight of the Federal Communications Commission, I remain concerned that little has improved since our last oversight hearing in March. Our work to institute real process reforms has traversed multiple chairmen and comes from our desire to guide the agency in a direction that works for the American people and enhances innovation, investment and jobs creation.

It has been my hope that working together we can make the FCC a shining exam-

It has been my hope that working together we can make the FCC a shining example of an effective, transparent, and apolitical government agency. As a Cubs fan, I still have hope. An FCC at its best is one that will benefit folks in Michigan and across the country as we continue to innovate and create jobs in the 21st century.

I look forward to Chairman Wheeler and Commissioner Pai's take about how we can make that happen. The American people and our nation's economy deserve better than what we have seen. Let's make sure they get it.

Forbes



Erika Morphy Contributor

I write about how companies make money (or should be making money).

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Leadership 7/06/2015 @ 10:36PM 6,996 views

How The FCC Saved Me \$1800

The Federal Communications Commission saved me \$1800 in a dispute with my ISP. How? By responding to a complaint I made within two days.

Yes.

Here is my story.

Close to a year ago I signed a two-year contract with my ISP to provide business-level service to my home office. The contract allowed that if I moved to an address where the ISP didn't provide this level of service I could break it without penalty. I did wind up moving out of its service area and I duly notified the company and faxed to it the necessary documentation. End of story, or so I thought.

Fast forward several months: I receive a bill for \$1800 for breaking my contract. I called customer service, of course, but made little headway with the reps over the course of my many, many phone calls to the company.

Then I receive another unpleasant and unexpected jolt: My account had been turned over to a third-party collections agency. For you folks out there who haven't had the pleasure, telling a third-party collections agent that 'this debt is a mistake' doesn't get you very far.

Fed up, I went online to file a complaint with the FCC.

The form, by the way, can be found right here.

And like magic, my troubles were over.

Two days after I filed the report I got a call from a service rep at the ISP who assured me he was working on the problem. It was escalated and then escalated again. Actual contact was made with the third-party collections agency.

One week after I filled out my complaint I was able to independently verify that 1) the ISP had closed its account on me with the third-party collections agency 2) my credit report had not been dinged.

Did I mention that form can be found here?

What Is New About the FCC?

Contacting the FCC for help is hardly a novel idea of course. It is the government agency, after all, that regulates telecom providers. But something has been different lately regarding that agency — a sense I picked up on Reddit as I poked around looking for advice.

My question was why -- and how?

One prevailing theory is that the FCC has found its mojo due to the new net neutrality rules that have been in effect for about two weeks or so. Thing is ... there have only been two complaints filed to date on net neutrality. Mine certainly wasn't one of them. Indeed the FCC handles a wide range of issues, not just net neutrality.

Another theory is that ISPs are seeking to short circuit the argument that arises whenever a merger or acquisition is proposed, which is that the dreadful customer service typical of the industry would get even worse. It may be that the industry is seeking to improve its reputation to put this argument to rest.

Somehow this doesn't resonate either — antitrust is about competition, not customer service. Although it can be argued that lack of the former leads to lack of the latter.

Or maybe the industry is just getting tired of all the hate.

What The FCC Said

Curious, I called the FCC to ask. The media representative couldn't speak to my specific issue — but he did suggest that the <u>new consumer help center</u> that the agency launched at the start of the year might have had something to do with it.

And just like that, it's bingo.

Tell me more, I said.

Under the previous system, customer complaints would be lodged through the FCC's 800 number or other online forms. These, though, had a turnaround time of 30 days — that, at least was how long the ISPs had to respond. Furthermore tracking was minimal at best.

The new site has far better tracking and the complaints are sent to the ISPs twice a week. The FCC's goal had been to send them once a week when the site launched but that hasn't happened yet.

So it is not that the FCC's enforcement capabilities have developed sharper teeth. The answer, it would appear, is that technology has made it easier to nudge the ISPs to action. I would guess the implicit threat that a complaint has been lodged and is now being tracked by both the consumer and the agency plays a role as well.

The new site also provides some interesting top-level data about the complaints that could be helpful to the industry. Complaints can be analyzed by category (such as phone or TV), by service type (such as cable or broadcast) and by U.S. state.

For example, since the new site launched at the beginning of the year 75 percent of the complaints received by the FCC have been about phone service. Some 12.8 percent have been about Internet service; 0.2 percent have been about emergency services and 1.8 percent about radio.

I will leave the industry analysis of these stats to others.

The bigger takeaway from this episode is that customer service technology amplified the customer's voice to solve a problem that didn't appear to be getting resolved otherwise.

It is not a novel insight – indeed, Voice of the Customer, or social listening technology as it is sometimes called, is a robust sector within CRM.

What's interesting is that in this particular case the technology was deployed by a regulator.

Are you listening companies?

Come back for my next post where I give companies some tips on how to hack their ineffective customer service operations.

This article is available online at: $\underline{\text{http://onforb.es/1UubmZm}}$

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Statement

of the

American Hospital Association

before the

Subcommittee on Communications and Technology

of the

Committee on Energy and Commerce

of the

United States House of Representatives

"Continued Oversight of the Federal Communications Commission"

July 28, 2015

On behalf of our nearly 5,000 member hospitals, health systems and other health care organizations, the American Hospital Association (AHA) wishes to express our concern with the Federal Communications Committee's (FCC) recent announcement that it will include an order permitting unlicensed devices to operate on the same frequencies as hospitals' Wireless Medical Telemetry Service (WMTS) its August 6 Open Meeting. The AHA requests a postponement of at least three months in the FCC's consideration of these rules so that interested stakeholders can continue to work on a compromise that will ensure patient safety is not affected by unlicensed devices operating on the same bandwidth hospitals use for patient monitoring

In 2000, the FCC dedicated a portion of the radio spectrum for wireless medical telemetry devices such as heart, blood pressure, respiratory and fetal monitors. The creation of the WMTS was a direct result of concerns raised over how electromagnetic interference with wireless medical telemetry equipment can affect patient safety. This issue gained national attention when a Dallas TV station, testing a digital television transmitter, knocked out of operation low-powered heart monitors at Baylor University Medical Center. Fortunately, no patients were harmed; however, this disruption placed patients at risk and could have resulted in serious injury



or death. Since 2000, the use of the WMTS has steadily increased, and there are now more than 360,000 WMTS patient monitors in U.S. hospitals.

The FCC is considering rules that would allow unlicensed devices to operate on the same frequencies as the WMTS. The AHA has been actively working with the FCC and other stakeholders to ensure that the new rules do not affect patient care; however, additional time is needed. Announcing an order during the August Open Meeting would be premature.

The attached July 21 letter from the AHA and the American Society for Healthcare Engineering, a personal membership group of the AHA, to the FCC highlights our concerns in greater detail and outlines a framework for a solution to this issue. Allowing additional time for the interested parties to continue to work toward a solution would not impact the FCC's timeline to move forward and would help ensure continued patient safety.

Should you have any questions please contact Erik Rasmussen at (202) 626-2981 or erasmussen@aha.org.





American Society for Healthcare Engineering

July 21, 2015

By Email

Honorable Tom Wheeler Chairman Federal Communications Commission 445 12th Street, SW Washington, DC 20554

Re: Amendment of Part 15 of the Commission's Rules for Unlicensed Operations in the Television Bands, ET Docket No. 14-165

Dear Mr. Chairman:

On behalf of the Wireless Medical Telemetry Coalition (the "Coalition"), I am writing to seek a postponement of at least three months in the Commission's consideration of technical rules for the use of Channel 37 by unlicensed TV White Space ("TVWS") devices. The Commission's July 16, 2015 press release indicated your intent to consider those matters in a *Report and Order* in the above-referenced rulemaking (the "Part 15 Rulemaking") at the Commission's August 6, 2015, Open Meeting. As discussed in detail below, the requested delay will allow on-going work on an industry-led compromise to proceed and hopefully be completed.

As we have noted in the record in this proceeding, the Coalition has concluded through analysis and actual testing at three different hospitals that the protection distances proposed in the Commission's Part 15 NPRM will not protect most hospitals' Channel 37 WMTS systems from harmful interference. Still, the Coalition has been working on a framework for establishing criteria that might be adopted by the Commission in the Part 15 Rulemaking for when, where, and how unlicensed TVWS devices could operate on Channel 37 while minimizing potential interference to any safety of life WMTS systems. The Coalition has reached out to the unlicensed community to find a mutually acceptable method of determining (a) the appropriate protection zones necessary to assure all WMTS systems interference-free operations, and (b) when environmental and operating factors for a particular hospital would allow unlicensed devices to operate at specific locations inside the calculated protection zone without causing harmful interference. The Coalition believes we have made progress toward finding a mutually satisfactory solution, and we have already exchanged ideas with representatives of the unlicensed community. But the process for resolving these very complicated issues is still relatively nascent, and we will need more time to reach what the Coalition optimistically believes will be a successful conclusion. Postponing the vote on Channel 37 issues for at least three months will provide that time.

We have no doubt that an industry compromise is the best way to resolve the Channel 37 issues raised in the Part 15 Rulemaking – and avoid certain lengthy administrative and legal challenges, likely by both sides of the issue, of any action taken by the Commission in August. The three months requested will give the Coalition, the unlicensed community, the FCC and any other interested parties the time they need to work through their differences and hopefully reach a compromise solution. And since the Commission has announced that Channel 37 will be available for use by unlicensed devices, delay should not impact the timing or planning for the Broadcast Incentive Auction. Unlike other issues in the *Report and Order* involving the spectrum that may be available in the 600 MHz band plan for unlicensed devices, the availability of Channel 37 is apparently no longer at issue. In short, we think the benefits of allowing the industry to continue working on a compromise far outweigh any burdens on the Commission's incentive auction timetable.

By way of background, on May 22, 2015, Google, Inc. filed an *ex parte* letter that purported to justify protection distances similar to those initially proposed by the Commission in the Part 15 Rulemaking. Because the Coalition strongly opposed Google's proposal as grossly inadequate to protect a significant number of existing WMTS systems, the Coalition filed its own detailed *ex parte* proposal on June 12, 2015 (the "June 12 *Ex Parte*"). In the June 12 *Ex Parte*, we identified the serious shortcomings in Google's approach and outlined our basis for determining the appropriate protection distances around WMTS systems that were necessary to assure that no WMTS licensee suffered interference by reason of the use of Channel 37 by unlicensed TVWS devices.

Since this Part 15 Rulemaking was initiated, approximately 150 hospitals from across the nation, located in a variety of urban, suburban and rural areas, along with many individual nurse practitioners, have filed comments in this proceeding outlining their use of WMTS systems in serving critical care patients, as well as the substantial benefits that WMTS systems provide throughout the nation's healthcare infrastructure. These letters identified the significant problems that any interference from unlicensed devices would cause in the hospitals' ability to monitor patients and the long-term impact that interference would have on health care services generally. The Coalition and GE Healthcare have also filed the results of real-world testing at three different hospitals that demonstrates that interference to WMTS systems will be caused by a TVWS device operating at the power-levels and distances proposed by the Commission.¹ On this record, the Commission would fail to meet its public interest obligations if it adopts the protection distances approaching those it has proposed, which simply will not protect WMTS systems from interference.²

¹ GE Healthcare filed the test report for Inova Mount Vernon Hospital with its initial comments in this proceeding on February 4, 2015. The WMTS Coalition filed the test reports for Froedtert Community Memorial Hospital and Wheaton Franciscan Healthcare – Franklin Hospital in two *ex parte* submissions filed July 20, 2015.

² As discussed below, the proposals in the Part 15 Rulemaking also failed to establish the necessary technical and regulatory framework to ensure that protection distances are effectively and reliably enforced.

Indeed, in recent meetings with the Commission's Office of Engineering and Technology, the Incentive Auctions Task Force and the Wireless Telecommunications Bureau, Google, an active proponent for unlicensed spectrum, has also acknowledged that "the Commission should establish conservative but reasonable protection areas for wireless medical telemetry users." Google still believes (erroneously) that there is a "typical" hospital environment in which most WMTS systems are being operated with characteristics that Google believes would shield them from harmful interference from nearby unlicensed devices. Google therefore continues to argue that the Commission "should not allow protection contours for atypical sites to serve as the default for all sites."

As the Coalition has demonstrated on the record, there is no "typical" hospital environment that can be characterized to assure WMTS systems will be shielded from interfering signals from a TVWS device, and thus there is no "atypical" environment either. For example, GE Healthcare and Comsearch have conducted tests at three working hospitals and demonstrated that interference would likely be suffered by the WMTS system at each site. These three hospitals had different building characteristics, different environmental factors and different man-made surroundings, yet none can be easily characterized as either "typical" or "atypical" for purposes of determining their need for protection from interference.

The Commission must acknowledge that its primary concern in adopting rules that will allow unlicensed use of Channel 37 must be to assure that such use will <u>not</u> result in harmful interference to <u>any</u> WMTS licensees who employ the band for patient critical applications.⁵ By utilizing the June 12 *Ex Parte* calculation of appropriate protection distances, the building penetration characteristics that are likely to exist in some area of most hospitals, and characteristics (e.g. receiver sensitivity) of the WMTS system itself that exist in many hospitals, the resulting protection distances should satisfy that objective. The Coalition thus strongly stands behind and supports use of the analysis described in the June 12 *Ex Parte*. The larger protection distances that are established as the "starting point" in determining the appropriate distance between TVWS devices and a potentially impacted WMTS system are absolutely required to ensure that WMTS systems will not suffer harmful interference from a TVWS device.

Since filing the June 12 Ex Parte, however, and as suggested therein, the Coalition has continued to study means by which, even with these appropriately conservative protection distances, certain TVWS devices may be allowed to operate on Channel 37 at particular locations within the protection zones of a particular hospital, when a number of designated factors specific to the hospital and TVWS devices would provide the same level of protection

³ See, e.g., letter from Aparna Sridhar, Google, to Marlene H. Dortch, FCC, ET Docket No. 14-165 and GN Docket No. 12-268, July 16, 2015.

⁵ Indeed, even if there were "atypical" hospital sites – and the Coalition vehemently disagrees with the notion that there is a "typical" environment that can be characterized for protection purposes – those sites too must be protected from interference.

from interfering signals as the larger protection zone. We believe that such an approach satisfies the interests of hospitals, by developing protection zones that will protect their most vulnerable WMTS installations. No less importantly, it should allow for expanded use of Channel 37 by unlicensed devices at locations where that use would not present as great a threat of interference to the hospital's WMTS system.

The Coalition would like to engage in further discussions with representatives of the unlicensed community to consider a proposal by which the FCC's Rules would create what we will refer to as "coordination zones" around each hospital, using the calculations presented by the Coalition in the June 12 Ex Parte. The rules would also provide a mechanism by which certain characteristics of the WMTS system and the hospital's surrounding environment would be entered into the appropriate databases. With those characteristics accurately catalogued, and using an automated, to-be-determined coordination process, the TVWS database administrators could allow a TVWS device to operate on Channel 37 <u>inside</u> a hospital's "coordination zone" (i.e., in closer proximity to a hospital).

The Coalition has identified a number of factors where, with accurate data input into a reliable and secure geolocation/database algorithm, TVWS devices may be able to operate within a hospital's "coordination zone":

- In calculating path loss, the WMTS coordination zones assume line-of-sight and free space path loss between the offending TVWS transmitter and the susceptible WMTS transmitter. While this is likely to be the case for many TVWS device locations, the Coalition recognizes that line-of-sight conditions will not occur from many other TVWS device locations. Where intervening terrain (considering the height of the hospital and the height of the TVWS antenna) can be accurately characterized, it could be factored into calculating whether and where a TVWS device can operate inside the coordination zone of a particular hospital without causing interference to its WMTS system.
- As the Commission has recognized, enforcing protection distances based solely on the WMTS system's location information in the ASHE database could be problematic, given the potential inaccuracy in many cases. Therefore the Coalition's proposed coordination zones were calculated by adding a factor of 300 meters for location inaccuracy and a factor for the broad area of a WMTS deployment. Google has suggested that a party should be able to accurately "map" the perimeter of every hospital in which a WMTS system is resident. With this information in the database, the coordination zone could be measured from that perimeter, thus eliminating any further adjustment for WMTS system location accuracy.

⁶ Although the formula utilized to determine the Coalition's proposed Coordination Zone around a hospital assumed that WMTS receiver sensitivity (normalized to occupied bandwidth) would be -100 dBm/10 kHz, if a hospital's WMTS system was less sensitive to interference than these "default" values used in our calculation (as reflected in the receiver sensitivity and bandwidth registered in the ASHE database), then the WMTS system's values would be used to determine an appropriate coordination zone for that hospital.

• Google has also asserted that it should be relatively easy to characterize man-made structures around a hospital that also provide a level of protection to a WMTS system from a TVWS device operating within a hospital's coordination zone. The Coalition recognizes that a hospital's environment may well provide additional path loss protection for a WMTS system; the challenge, however, is accurately to characterize (and regularly update) the surrounding buildings and infrastructure into the appropriate database. To the extent that this can be accomplished, this information could also be factored in determining whether and where a TVWS device could operate within a hospital's coordination zone without creating harmful interference to that hospital's WMTS system.

There may be other characteristics of a hospital that can be objectively and accurately quantified and updated for each WMTS system licensee. If so, these too could also be stored in the appropriate database in order to allow individual TVWS devices to operate on Channel 37 even when they are operating at certain locations within a hospital's "coordination zone" without increasing the risk that harmful interference will be caused to the WMTS system.

However, in addition to identifying the appropriate characteristics of a WMTS licensee's operations and environment, the WMTS community, the WMTS database coordinator, the unlicensed device community, and the TVWS Database administrators must also develop a method of obtaining, validating, storing and updating these characteristics. No less importantly, these parties need to work cooperatively with the Commission to agree on a mutually acceptable "coordination calculus" that could be applied to the applicable characteristics to allow TVWS devices to operate within each hospital's coordination zone, on a hospital-by-hospital basis. This work could generate an industry-wide resolution of otherwise strong differences of view as to how best to protect WMTS systems and also allow unlicensed devices to operate on a non-interference basis on Channel 37. But the industry needs time – significantly more time than is available before the scheduled August 6, 2015 Commission meeting -- to work through these complex issues to a fruitful conclusion.

There are other important issues to consider and resolve for a full industry compromise to be achieved. While the parties may agree on coordination zones and the rules for allowing closer operation without causing interference to WMTS systems, the Commission must still recognize the possibility that interference will occur nevertheless. Thus, technical and procedural mechanisms must be adopted that will eliminate as quickly as possible the risk to patient safety (and to health-care practitioners' confidence in their WMTS systems) by assuring that any interference that does occur is resolved with urgency and due speed.

⁷ These parties will also have to determine how to cover the costs that may be incurred by both the ASHE WMTS database and the TVWS database administrators in developing, maintaining and sharing this information. While WMTS licensees may appropriately be tasked with maintaining accurate registration information in the ASHE WMTS database, neither ASHE nor the nation's healthcare institutions should be required to pay for any other changes which are necessary to accommodate the use of Channel 37 by unlicensed users who wish to operate in closer proximity to hospitals than the coordination zones would permit

To that end, the Coalition has begun considering and discussing with advocates of unlicensed use of Channel 37, a number of proposals that would both mitigate the potential for, and provide prompt relief to, WMTS systems suffering from, interference:

- The rules for operation of unlicensed devices in the 600 MHz band should be modified to require that TVWS Database Operators will prioritize the recommendation of channels so that Channel 37 will be authorized only when it is the sole channel available for use by a TVWS device:
- A mechanism must be developed that allows a WMTS licensee experiencing interference to alert the WMTS Coordinator who, via the TVWS Databases, can temporarily disallow use of Channel 37 for certain TVWS devices and/or locations until the interference source has been identified. The rules would also need to provide a protocol for the appropriate database administrators (working with the WMTS Licensee) to determine which, if any, TVWS device(s) were causing the interference problem.⁸

While there are many details that need to be worked through, with creative thinking by all interested parties, and a good faith commitment by all sides to forge a workable compromise, a mutually satisfactory solution to this element of the rules can be developed. The Coalition welcomes the opportunity to work with the Commission Staff, Google, and others to find the solution that must accompany any decision to allow unlicensed devices to operate in Channel $37^{\,9}$

Finally, there remains some disagreement between the WMTS community and the unlicensed device communities as to whether personal portables TWVS devices should be allowed to operate on Channel 37. As the Coalition has consistently urged, personal portable devices, given their ubiquity, itinerant and mobile nature, pose too much risk of interference to WMTS systems – interference which could not be easily traced or resolved, but would nevertheless be damaging. On the other hand, assuming geolocation/database technology will mature, there may be a time when personal portable devices can operate in Channel 37 without creating significantly more risk of interference. Therefore, the Coalition suggests a phasing-in process for the use of Channel 37 by unlicensed devices. For example, the Commission could

⁸ To that end, the rules for use of Channel 37 should make clear that unlicensed TVWS devices must honor changes to the database within minutes, not hours, where any type of interference to WMTS has been identified.

⁹ The Coalition was pleased to see that Google, in a recent *ex parte* meetings with the FCC Staff also recognizes that allowing operation of unlicensed devices closer in proximity to hospitals than the distances recommended by the Coalition must come with "the establishment of a timely means for these users to expand protection in the event that they experience interference at a particular site." Letter from Aparna Sridhar, Google, to Marlene Dortch, ET Docket No. 14-165 (July 16, 2015). Google suggested, for example, an approach whereby when interference occurred, the geographic area in which Channel 37 could be used around a hospital would be expanded for a certain period of time, during which the hospital could work with the TVWS database administrators and the Commission staff to determine the source of the suspected interference and make any necessary adjustments to the protection area for a particular site.

authorize only fixed devices¹⁰ for the first 36 month period after the rules have been adopted, but announce the effective date for the use of the band by personal portable devices upon adopting the rules. If the experience with the rules is good (*i.e.*, there have not been complaints of interference to WMTS systems), the effective date for the use of Channel 37 by personal portable devices could remain in place. If, however, there are a number of incidents of interference from fixed TVWS devices, the Commission could timely suspend or delay the effective date for the use of the band by personal portable devices until the problems were resolved. This cautious "walk-before-run" approach, along with other creative ideas, are on the table for discussion with the unlicensed community – if industry is given the time to work through them.

There should be little doubt that an industry consensus on these important issues will be far more effective, and far less open to criticism or appeal, than a Commission decision which is based on the partisan filings of the parties. I therefore ask you to remove consideration of the Channel 37 issues from the Report and Order in the Part 15 Rulemaking that will be considered at the Commission's August Open Meeting in order to give the stakeholders in the Channel 37 issue at least three more months to forge an industry compromise.

Thank you for your consideration of this information and request.

Sincerely,

The WMTS Coalition By The American Society for Healthcare Engineering of The American Hospital Association

<u>/2,</u>

By: Dale Woodin Executive Director

155 North Wacker Drive Suite 400 Chicago, IL 60606

cc (by Email): Commissioner Mignon Clyburn Commissioner Jessica Rosenworcel Commissioner Ajit Pai

¹⁰ In order to be allowed to operate on Channel 37, fixed devices must be required to incorporate reliable secure and accurate geolocation technology, which is the foundation of ANY geolocation/database based approach to safely sharing Channel 37.

Commissioner Michael O'Rielly Julius Knapp Roger Sherman Gary Epstein ET Docket No. 14-165



July 24, 2015

The Honorable Greg Walden U.S. House of Representatives Washington, DC 20515

Dear Chairman Walden:

The FCC recently published in the Federal Register a Telephone Consumer Protection Act Declaratory Rule and Order (Rule). Unfortunately the Rule increases challenges and economic risks for businesses trying to communicate consumer friendly content. Modifying the Telephone Consumer Protection Act in four key areas would still keep strong protections for consumers while making it more efficient and effective for our company, CarePayment, and our provider clients to communicate with patients about consumer-friendly payment options. Affordable patient financing, such as our credit lines at 0.00% APR for the life of the account with no hidden fees or impact on consumer credit scores, enables people to receive necessary care while helping them avoid the negative consequences of delinquent medical debt. The use of efficient calling techniques would make it easier to reach more patients who could benefit from these payment programs.

Here are our specific concerns about the current Rule:

No Distinction between Telemarketing Calls and Informational Calls

The new Rule does not adequately distinguish between telemarketing calls (that do not have a direct nexus with a product or services that the consumer already has received from a business) and informational calls that are associated with the product or service, like payment options to enable patients to more affordably retire their medical bills.

- No distinction in terms of the restriction on calls to wireless numbers;
- TCPA restrictions on "autodialed, artificial-voice, and prerecorded-voice calls" made by "any automatic telephone dialing system" to mobile phones "apply equally to telemarketing and informational only calls."

Healthcare Exception

While the <u>healthcare exception</u> (which the FCC outlined in the new rules) is advantageous for providers and patients, it does not go far enough by extending the exception to permit use of autodialers and other technology-based means, like text messaging, to inform patients about matters inextricably linked with their medical care. CarePayment frequently hears from patients that learning about payment options upfront or shortly after treatment gives them peace of mind that the costs of such care will not cripple their budget.

- * Exemption for healthcare treatment:
 - The FCC granted exemption to use autodialers and prerecorded messages on free-to-end-user calls
 for which there is exigency and that have a healthcare purpose, specifically—appointment and exam
 confirmations and reminders, wellness checkups, hospital pre-registration instructions, pre-operative
 instructions, lab results, post-discharge follow-up intended to prevent readmission, prescription
 notifications, and home healthcare instructions.

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- Calls that include telemarketing, solicitation, or advertising content, or that include accounting, billing, debt collection, or other financial content are not exempt, so patient consent is required for those calls using autodialers and pre-recorded messages.
- If hospitals or their third-party associates could use autodialers and pre-recorded messages to not only
 inform patients about appointment and exam times and other specific medical care elements, but also
 about matters associated with their medical bills, patients would have more useful information for
 making decisions related to their care.
- Hospitals or their third party associates could provide patients with "soup to nuts" information about
 their care and post-care matters; autodialers and pre-recorded messages are often the most efficient and
 successful way to inform patients and facilitate a better experience for them overall.
- We recommend that the FCC expand this exception to permit use of autodialers and pre-recorded messages to address these financial matters related to medical care and handling of bills.

Definition of Autodialer

The Commission declined to provide a bright-line definition of "autodialer."

- The Commission rejected arguments by petitioners that it should adopt a standard requiring that an
 autodialer have the present ability to store or produce telephone numbers to be called, using a random
 or sequential number generator; instead, the Commission adheres to the "capacity" test for an
 autodialer.
- The Commission reiterated that "the capacity of an autodialer is not limited to its current configuration but also includes its potential future functionalities."
- Unfortunately, the Commission did not describe in detail what specific type or degree of modification would be necessary for a device to not be deemed an autodialer.
- The only safe harbors the Commission provided were exceptionally unhelpful; for example, it found that—a rotary phone is not an autodialer and neither is a "handset with the mere addition of a speed dial button; it leaves open that smart phones are potentially deemed autodialers.
- Placing calls using methods that require human intervention should be granted safe harbor.

Revoking Consent

A called party may revoke previously given prior consent at any time through any reasonable means; a caller may not limit the manner in which revocation can occur.

- According to the FCC, "[c]onsumers generally may revoke, for example, by way of a consumer-initiated
 call, directly in response to a call initiated or made by a caller, or at an in-store bill payment location,
 among other possibilities."
- The TCPA did not contain language specifying the means of opting out, in contrast to the Fair Credit Reporting Act.
 - According to the FCC, allowing additional restrictions on revoking consent "would place significant burden on the called party who no longer wishes to receive such calls, which is inconsistent with the TCPA"
 - The Commission said "[a]llowing oral consent does not put defendant callers at a disadvantage; callers simply need to continue to maintain proper business records tracking consent."
- Our opinion is that this places an unfair burden on businesses to manage an opt-out process, especially, for instance, in the context like ours, where a patient goes into the hospital to pay a bill and orally revokes consent; this revocation would require ongoing communication between hospital systems about revocations and service providers, with timing delays that are onerous and unfair to businesses.



The Commission should allow reasonable limitations on revocation means—e.g., mandate that all
revocations go to specific phone numbers, mail or email addresses to provide a manageable method for
tracking purposes.

Treatment of Calls to Reassigned Numbers

The Commission states that callers are liable for autodialed or prerecorded calls to reassigned wireless numbers when the current subscriber or customer user of the number has not consented; the Commission takes the position that caller best practices can facilitate the detection of reassignment before calls are

- The Commission rejected the "intended called party" standard, fearing that "unwitting recipients of reassigned numbers might face a barrage of telemarketing voice calls and texts along with debt collection calls."
- The Commission adopted the position taken by the Chairman in his TCPA fact sheet that callers were
 limited to one call or message to a reassigned number, regardless of whether the caller reached anyone
 or received a reply to that call or message (essentially a "free pass," although it is more of a free
 "attempt").
- The Commission's position is that a single call, even one that does not succeed in reaching a consumer
 with a reassigned number and being informed that the caller did not reach the intended called party, is
 sufficient for the caller to have at least "constructive knowledge" that the number has been reassigned.
- This decision poses clear challenges for calling parties because there does not exist a 100% accurate
 database of reassigned numbers, as callers may not learn from an initial call or message that the number
 has been reassigned; it also opens the door for rampant litigation because entities do not get more than
 the one free attempt for calling a misdialed number.
- Businesses are facing an unfair and substantial economic risk of expensive lawsuits and regulatory fines even while exercising best practices to conform to the Rule. Consumers should bear some responsibility for mitigating concern of repeat calls by being required to inform callers that they have reached an unintended party, a cell phone for which no consent exists, or a land line for which no consent exists. Instead, consumers have financial incentives not to inform callers they have reached an unintended party or a cell line as each call can result in financial rewards of up to \$1,500.

VOIP Concerns

The Commission did not discuss:

- VOIP issues (i.e., land line ported to VOIP, which porting carries risk of TCPA violations, despite no notice
 of the porting).
- Calls ported from land lines (which lines do not require prior express consent) to a wireless line; this situation creates unfair risk of a TCPA violation without a means to mitigate/avoid such risk; when calling a landline consent is not required, but the if consumer ports the landline to a wireless or VOIP line, then a caller risks violating the TCPA prohibition on using an autodialer to call such number even though no comprehensive, real-time data base exists to scrub such numbers and put callers on notice that numbers were ported.

Please consider the issues above in your review. Representatives from CarePayment are happy to provide more information or answer any questions the Committee may have with regard to our concerns. We at CarePayment appreciate your attention to this matter.



FROM PROPOSAL TO DEPLOYMENT: THE HISTORY OF SPECTRUM ALLOCATION TIMELINES

To Re-Allocate the Additional 350 MHz of Licensed Spectrum Needed by 2019, Policymakers Must Act Now

Thomas K. Sawanobori, SVP and Chief Technology Officer

Dr. Robert Roche, VP, Research Public Affairs

Bringing new spectrum into the hands of wireless operators to provide broadband services to U.S. consumers takes a significant amount of time. The legislative and regulatory process for the AWS-3 auction began in 2002, the auction ended earlier this year, and commercial deployment is not expected to begin for another two years.

By 2019, the U.S. will see a 78-fold increase in wireless data use over the 2010 level.¹ Taking into account additional infrastructure and increased spectral efficiencies, CTIA has calculated the amount of additional licensed spectrum – over 350 MHz – necessary by the end of the decade to meet this explosion in mobile data.²

Yet after the broadcast incentive auction, the traditional licensed spectrum pipeline is empty. The ability of the U.S. to remain the global leader in wireless depends upon the ability of the government to provide operators with sufficient licensed spectrum over the next five years and beyond – a point echoed by FCC Chairman Tom Wheeler recently when he noted that spectrum will play a major role "in determining who will be the international leader for 5G broadband networks." 3

The 350 MHz target is daunting. A review of previous reallocation efforts shows that it takes, on average, 13 years to reallocate spectrum for wireless use. This underscores the urgency of beginning this process today.

There is reason for optimism that we can work collaboratively to shrink that timeline. The wireless industry is ready to quickly deploy spectrum once airwaves are auctioned or reallocated. Government partners have streamlined their procedures.

SPECTRUM	BANDS	FIRST STEP	AVAILABLE FOR USE	FIRST DEPLOYMENT	APPROXIMATE TIME LAG
Celtilar		1970	1981	Pas	11 years
PCS	1850-1920; 1930-2000 MHz	1989	1995	1995	6 years
SMR	817-824; 862- 869 MHz	1995	2012	2013	18 years
700 MH		1996	2007	2010	14 years
AWS-1	1710-1755; 2110-2155 MHz	2000	2006	2008	8 years
14.5		1997	7012	2015	Tryeat
AWS-3	1695-1710, 1755-1780; 2155-2180 MHz	2002	2015	2017 (estimated)	15 years
ANT		140	2017		
600 MHz	TBD	2014	2016 (estimated)	TBD	TBD

The timelines can be accelerated both preand post-auction, as the experience with certain bands – PCS, AWS-1, and the upcoming incentive auction – illustrates. But it is incumbent upon policymakers to take that first step, to begin the process as soon as possible.

THE DAUNTING HISTORICAL TIMELINES TO REALLOCATE SPECTRUM FOR WIRELESS

On average, it takes over 13 years to get spectrum into the hands of consumers.

The National Broadband Plan catalogued the length of time past spectrum reallocation efforts have taken. ⁴ The FCC measured the reallocation process starting from the initial Order to the granting of the licenses or the auction's closing. ⁵ While illustrative of the timeline, as a practical matter, this underestimates the total time by discounting the often lengthy time required to get to an Order.

Nonetheless, the table on the previous page represents an update of the FCC's data to capture additional spectrum bands reallocated since 2010 and notes when service was first deployed – not just when the spectrum was available for use.

The data show that the process of reallocating spectrum for wireless has taken between six and 18 years – on average 13 years – from FCC Order to first deployment.

This timing challenge dates back to the original cellular bands. The FCC adopted its First Report in 1970, began accepting applications for licenses in 1975, and licensed the first cellular system in 1982.6 Commercial service began when Ameritech

Mobile Communication launched its network in Chicago on October 13, 1983.⁷ In the years since, the timelines to reallocate spectrum have not improved with any consistency, as the lengthy AWS-3 process demonstrates.

The policy implication of these facts and the 13-year average is clear: we must begin now to identify the 350 MHz of licensed spectrum to meet the increase in wireless traffic expected in 2019 and beyond.

Some suggest these challenges necessitate a departure from the goal of clearing spectrum for wireless services. However, such delays are not new,⁸ spectrum's quality as a finite resource is not a recent development,⁹ and these lengthy timelines are not constrained to mobile wireless services.¹⁰ Licensed spectrum made the U.S. the global leader in wireless, and lessons learned from recent spectrum reallocation efforts can provide the path for future efforts.

We cannot rest at the turn of the decade either, as new innovations will continue to increase the demand for wireless data. Carriers are already exploring new technologies, and 4G LTE usage will continue to grow well beyond 2020. 11 Some projections estimate that the Internet of Things may connect up to 50 billion devices by the end of the decade. 12

Furthermore, countries around the world are looking to 5G not merely as a wireless technology, but as a key input for economic growth. When and how we introduce 5G in the United States depends in part on whether we keep our spectrum policy as forward-looking as our industry.

THE TIME LAG IN THE DEPLOYMENT OF NEW LICENSED SPECTRUM IS IMPACTED BY A MULTITUDE OF FACTORS

The Critical Role of Congress. Congress first provided the FCC with the authority to conduct spectrum auctions in 1993. One of the primary goals in granting the Commission that authority was "more efficient spectrum management." 13

A review of spectrum allocations for wireless since 1993 finds that additional Congressional involvement was necessary for the majority of the spectrum allocated for wireless voice and mobile data services over the past 23 years.

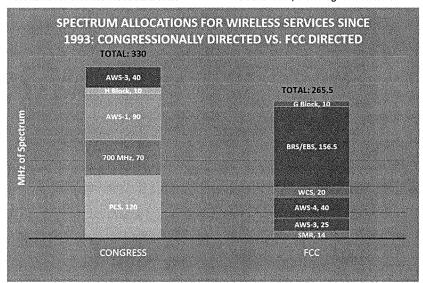
As the chart below illustrates, Congress directed the Commission to auction 55 percent of the licensed spectrum made available for wireless broadband since

1993. For example, Congress played a key role in the PCS, ¹⁴ AWS-1, ¹⁵ 700 MHz, ¹⁶ H-Block and AWS-3 auctions. ¹⁷

Congress also plays a critical oversight role to keep auctions and allocations on track. The need for continued Congressional involvement underscores the difficulty in bringing spectrum for wireless broadband to auction, and adds time to those efforts.

The Critical Role of the Administration. Today, the federal government has sole or primary use of between 60-70 percent of spectrum suitable for wireless broadband. Given this fact, every Administration plays a key role in coordinating agencies' efforts before, during, and after spectrum reallocation efforts. 19

The Obama Administration deserves credit on this front, including for a series of



Presidential Memoranda and Executive Orders that have emphasized this issue across a host of executive departments, agencies, and offices and helped set the stage for progress on spectrum.²⁰

Since 2010, the Administration has spearheaded efforts to re-allocate 135 MHz for mobile broadband. As spectrum bands are considered and once bands are reallocated, such support is critical.

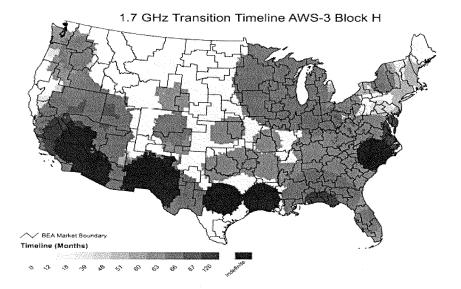
In the AWS-1 band, 12 different agencies had to cease operations of their systems before relocating in new bands.²² In the 1755-1850 MHz band, the lower 25 MHz of which was auctioned earlier this year, 19 different federal agencies had operations.²³

Without Administration backing and commitment, spectrum reallocations efforts may lag even further behind.

Clearing Existing Users. Once spectrum is auctioned or re-allocated, existing systems in those spectrum bands need to be cleared, either relocated or retuned. Finding a new home for relocated incumbents is critical to ensure that important mission-critical services remain operational for government agencies.

The process of clearing incumbents, especially federal government incumbents is always an arduous undertaking, and one that can take years and cost billions. For instance, winning licensees of 700 MHz spectrum, auctioned in 2008, faced "a process that took several years and had multiple delays."²⁴

The map below illustrates the estimated post-auction transition timelines associated with a portion of AWS-3 spectrum.²⁵



In addition, multiple federal agencies frequently occupy a given spectrum band, complicating the clearing process. Three years after the 2006 AWS-1 auction, many federal agencies had not completed clearing their operations from the band, delaying the deployment of mobile broadband services.²⁶

Final AWS-1 relocation costs are expected to total approximately \$1.5 billion, and NTIA estimates that the relocation of users in the AWS-1 band will not be complete until 2017, over a decade after wireless carriers placed their winning bids.²⁷

Technical Issues. A range of issues must typically be resolved – frequently through standards-setting processes – before wireless carriers and equipment manufacturers consider deployment in new spectrum bands.

The reliance on marketplace-driven, industry-based standards setting can aid the deployment of new wireless services. However, bringing the consensus-driven standards process to a successful conclusion can add time to the process of getting more spectrum in the hands of wireless consumers. The work of the initial LTE standards, for instance, began in 2004 and was not finalized until 2008.²⁸

Furthermore, international harmonization, achieved through entities such as the ITU, has economic (increased economies of scale), technical (better management of interference), and social (lower barriers to market entry) benefits.

Once a new spectrum band has been reallocated, technical issues for each specific band must be planned and

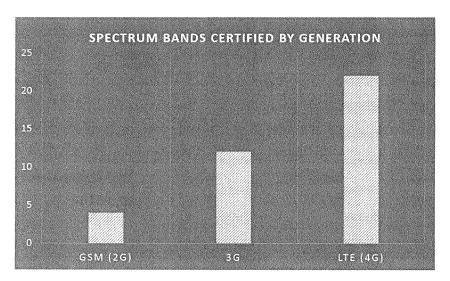
validated, such as "power levels, band classes, frequency allocations ..., compatibility of network equipment and other aspects of networking" in order "to facilitate communications on a global basis." ²⁹

Network Equipment, Chipset, and Handset Design and Manufacture. After the standards setting process concludes, handset and equipment manufacturers "must design and manufacture network equipment and chipsets that can function over a certain band of spectrum." 30

As more spectrum bands come into use and as more devices are produced for use throughout the world, manufacturing those handsets and network equipment grows more complicated. The iPhone 6 supports up to 20 LTE bands, seven more than the iPhone 5.³¹ As the chart on the following page illustrates, every successive wireless technology generation operates in a greater number of spectrum bands.³²

The technical intricacies of network gear and handsets are not limited to device and equipment manufacturers. Wireless carriers spend significant time to ensure device and network compatibility with new spectrum bands. Indeed, "it may take a few years before a carrier can put a new spectrum band to use with a new generation of technologies." 33

The U.S. Department of Justice recently acknowledged this fact, stating, "Carriers must engage in years of planning and development before spectrum acquired at auction can be put to use to benefit consumers," and noting that "once a carrier has certainty about which specific licenses it will be awarded, the carrier must then



begin the process of ensuring that its customer devices and network equipment can communicate on those frequencies."34

Interference Testing. Before wireless services are deployed on new spectrum bands, they must undergo rigorous testing to ensure that the deployments do not cause interference to users in other bands. And as more services are packed into spectrum bands, the need to be good neighbors to adjacent users takes on greater importance.

For example, the 700 MHz A-Block had well-documented interference issues, due to Channel 51's location directly adjacent to the downlink band for the 700 MHz A-Block. That interference threat caused a delay in the use of the band for mobile broadband.

Furthermore, effective pre-deployment network testing requires an interferencefree environment. For instance, drive tests and optimization are standard components of the network deployment process. Carriers must be able to conduct this testing in the frequency environment for commercial services, not spectrum impaired by interference.

Cell Site Deployment and Modifications. At the same time, cell sites need to be built or modified to handle new frequencies. For instance, "towers may need additional antennas, filters, or backhaul to support new spectrum bands," 35 which means renegotiating tower leases and possibly strengthening the structure to accommodate the increased tower load.

The FCC has taken laudable steps to reduce regulatory burdens for infrastructure deployment.³⁶ Yet that process can remain expensive and time-consuming.

For instance, an FCC report noted in the context of the incentive auction that

"[n]egotiations with site and tower owners ... are unpredictable in length and may cause uncertainty in the timing of the process." 37 One company has described "wireless siting permit issues [that] are so prevalent that [the carrier] has had to bring or defend

more than 300 lawsuits in state and federal courts."38

Even on federal and Tribal lands – subject to a 2012 Executive Order designed to facilitate wireless broadband infrastructure deployment³⁹ – carriers face antenna siting difficulties.

The Department of Defense, for instance, has some of the most expensive lease terms – well above market rates – and a lengthy wireless application review process. 40 Leases to place new sites on lands regulated by the Bureau of Land Management and the National Park Service can take up to three years to negotiate. 41

In a recent opportunity to comment on some of the structural barriers to broadband deployment, wireless carriers noted the continued impact associated with administrative burdens on wireless siting on federal and Tribal lands⁴² – which represent approximately 30 percent of U.S. land mass.

For all tower sites, radios, antennas, backhaul, site modifications, permitting, and lease modifications are factors which

"[W]e need to increase the spectrum pipeline. We have, of course, a big auction on the horizon that involves choice airwaves in the 600 MHz band. But we need to think beyond this one auction now. We need to find ways to speed the process of repurposing more spectrum for mobile broadband use."

FCC Commissioner
 Jessica Rosenworcel

contribute to the time lag between a spectrum reallocation proposal and deployment.

THE AWS-3 BAND: A CASE STUDY

Clearing spectrum will always present challenges, but as the following case study illustrates,

those obstacles can be overcome with hard work and a multi-stakeholder commitment to collaboration.

The AWS-3 auction also underscores that such efforts take time. Indeed, the history of the AWS-3 auction stretches back to 2001, when NTIA evaluated the potential of reallocating the 1710-1850 MHz band.⁴³

A brief recap: Following the 2001 NTIA report, the FCC allocated various portions of the 2155-2180 MHz band as AWS-3 spectrum in a series of orders dating back to 2002.⁴⁴ One of the goals throughout this continued refinement of the upper band was to create large, contiguous blocks of internationally harmonized spectrum.

In 2010, the National Broadband Plan recommended that government agencies determine if 1755-1780 MHz could be paired with 2155-2180 MHz.⁴⁵ NTIA said at the time that commercial access to 1755-1780 MHz wouldn't be possible in the nearterm.⁴⁶ It was called "a very tough band,"⁴⁷ a "tricky area to navigate politically;"⁴⁸ and "not viable."⁴⁹

Nevertheless, in 2012, Congress directed the FCC to auction 2155-2180 MHz and 15 MHz between 1675 and 1710 MHz. Even after Congressional action, however, "no one was sure" that the FCC would move forward with the auction. 50

"While we're making progress toward to the Administration's spectrum goals, we have much more to do. We have no plan beyond 2020 to accommodate mobile growth, and the closer we get, the more daunting the timeline looks."

- CTIA President and CEO Meredith Baker There is no more traditional licensed spectrum in the pipeline after the incentive auction, and on average it takes 13 years to reallocate or auction and clear spectrum.

The protracted process of freeing up spectrum places

the U.S. at risk of losing its wireless broadband leadership. It is critical to move now to identify new bands to enable the continued growth of wireless – for 4G LTE, LTE Advanced, the Internet of Things, and next generation technologies like 5G.

Failure to move quickly will not be felt only by wireless carriers and equipment manufacturers. The continued success of the mobile apps industry, for example – a source of employment for over 750,000 people – depends on more spectrum.

As other industries, from health to transportation, embrace the wireless platform, spectrum demand will only increase. And the consequences of a spectrum shortage will only escalate.

With serious commitment, the time it takes to reallocate licensed spectrum can be fast-tracked. Let's get to work.

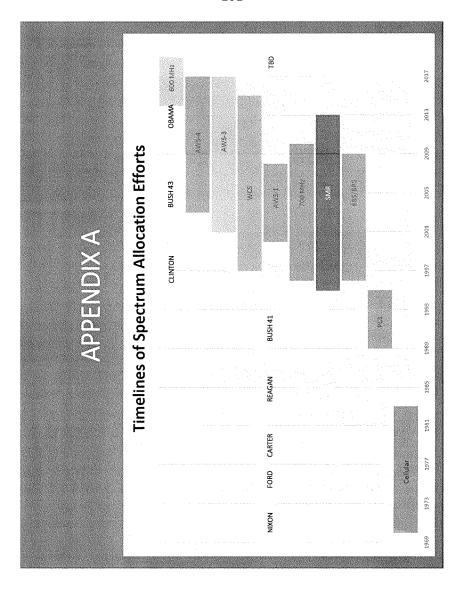
And for good reason. Even the relatively clean 2155-2175 MHz band contained over 1,800 active licenses.⁵¹ Overall, AWS-3 licenses "will have to negotiate coordination agreements with 17 different government agencies regarding 2,500 frequency assignments."⁵²

However, thanks to unprecedented collaboration between federal agencies and industry and strong support from the FCC and NTIA, progress continued. In 2014, the FCC paired the 1755-1780 MHz and 2155-2180 MHz bands together, and added a mobile uplink band at 1695-1710 MHz.⁵³

The auction closed earlier this year, and government relocation efforts have already begun, with the earliest commercial deployment expected in 2017. Thus, from NTIA's report to those bands actually deployed into the hands of consumers, over a decade and a half will have passed by.

CONCLUSION

This report highlights the urgency necessary in the effort to identify and reallocate licensed spectrum.



- ¹ Cisco, VNI Mobile Forecast Highlights, 2014 2019, http://www.cisco.com/c/dam/assets/sol/sp/vni/forecast_highlights_mobile/index.html#~Country.
- ² The Brattle Group, Substantial Licensed Spectrum Deficit (2015-2019): Updating the FCC's Mobile Data Demand Projections (June 23, 2015), http://www.ctia.org/docs/default-source/default-document-library/bazelon_mchenry_spectrum-deficit_2015-06-23.pdf.
- ³ Prepared Remarks of FCC Chairman Tom Wheeler, The Brookings Institution (June 26, 2015), http://transition.fcc.gov/Daily_Releases/Daily_Business/2015/db0626/DOC-334141A1.pdf.
- ⁴ Federal Communications Commission, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN at 79 (2010), https://transition.fcc.gov/national-broadband-plan/national-broadband-plan.pdf. Since the Plan's release, the FCC also completed an auction of the 1.9 GHz PCS H Block in February 2014. Federal Communications Commission, Public Notice, Auction of H Block Licenses in the 1915-1920 MHz and 1995-2000 MHz Bands Closes (Feb. 28, 2014), https://apps.fcc.gov/edocs-public/attachmatch/DA-14-279A1.pdf.
- ⁵ Except in the case of the 700 MHz auction that took place in 2008. Incumbents in that band were not required to cease transmissions until June 12, 2009.
- ⁶ John O. Robinson, Federal Communications Commission, OPP Working Paper Series 15, Spectrum Management Policy in the United States: A Historical Account at 74 (1985), https://transition.fcc.gov/Bureaus/OPP/working papers/oppwp15.pdf ("OPP Spectrum Policy Paper").
- ⁷ Joel West, Institutional Constraints of Cellular Telephone Service on Three Continents at 205 (2000), http://www.joelwest.org/Papers/West2000.pdf.
- ⁸ As far back as 1949, an FCC commissioner had sought a spectrum allocation for common carrier mobile radiotelephone the precursor to the wireless services eventually deployed *34 years later* and the basis for the mobile connected life we enjoy today. OPP SPECTRUM POLICY PAPER at 64.
- ⁹ The notion of spectrum's quality as a finite resource is not a recent development either, as a 1985 FCC paper noted: "Scarcity of usable spectrum was already influencing spectrum allocation for land mobile in 1930." *Id.*, Appendix B at 5.
- ¹⁰ Milton Mueller, Cato Institute, Policy Analysis No. 21: Property Rights in Radio Communication: The Key to the Reform of Telecommunications Regulation (1982), http://www.cato.org/pubs/pas/pa011.html.
- ¹¹ See Ericsson, ERICSSON MOBILITY REPORT: ON THE PULSE OF THE NETWORKED SOCIETY at 7 (2014), http://www.ericsson.com/res/docs/2014/ericsson-mobility-report-november-2014.pdf.
- ¹² CTIA, MOBILE CYBERSECURITY AND THE INTERNET OF THINGS: EMPOWERING M2M COMMUNICATIONS at 3 (2014), http://www.ctia.org/docs/default-source/default-document-library/ctia-iot-white-paper.pdf.
- ¹³ Max D. Paglin et al., eds., The Communications ACT: A LEGISLATIVE HISTORY OF THE MAJOR AMENDMENTS, 1934-1996 at 26 (1999).
- ¹⁴ Omnibus Budget Reconciliation Act of 1993, Pub. L. No. 103-66 (1993); see also Reed E. Hundt and Gregory L. Rosston, ARTICULATING A MODERN APPROACH TO FCC COMPETITION POLICY at X (2013), https://www.techpolicyinstitute.org/files/hundt-rosston-articulating%20a%20modern%20approach%2 https://www.techpolicyinstitute.org/files/hundt-rosston-articulating%20aff/ https://www.techpolicyinstitute.org/files/hundt-rosston-articulating%20aff/ https://

authority to assign licenses via auctions, set stringent timelines for the implementation of the auctions for the PCS spectrum licenses, and created a new regulatory framework for Commercial Mobile Radio

- ¹⁵ Balanced Budget Act of 1997, Pub. L. No. 105-33 (1997).
- ¹⁶ Deficit Reduction Act of 2005, Pub. L. No. 109-171 (2006).
- ¹⁷ Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96 (2012).
- ¹⁸ Scott Bergmann, AWS-Auction 101, CTIA Blog (Nov. 12, 2014), http://blog.ctia.org/2014/11/12/aws-3-auction-101/.
- ¹⁹ Even in the early days of the FCC when the airwaves were not as crowded, efforts to allocate spectrum took years. For instance, the allocation process for VHF spectrum above 30 MHz took six years. OPP SPECTRUM POLICY PAPER at 57.
- ²⁰ See, e.g., The White House, Presidential Memorandum: Unleashing the Wireless Broadband Revolution (June 28, 2010), https://www.whitehouse.gov/the-press-office/presidential-memorandum-expanding-wireless-broadband-revolution; The White House, Presidential Memorandum Expanding America's Leadership in Wireless Innovation (June 14, 2013), https://www.whitehouse.gov/the-press-office/2013/06/14/presidential-memorandum-expanding-americas-leadership-wireless-innovatio">https://www.whitehouse.gov/the-press-office/presidential-memorandum-expanding-americas-leadership-wireless-innovation.
- ²¹ CTIA, MOBILE DATA DEMAND: GROWTH FORECASTS MET at 8 (2015), https://www.ctia.org/docs/default-source/default-document-library/062115mobile-data-demands-white-paper.pdf.
- 22 U.S. Department of Commerce, Relocation of Federal Radio Systems from the 1710-1755 MHz Spectrum Band: Eighth Annual Progress Report at 2 (2015),
- http://www.ntia.doc.gov/files/ntia/publications/eighth annual report 1710-1755 relocation.pdf.
- 23 U.S. Department of Commerce, AN ASSESSMENT OF THE VIABILITY OF ACCOMMODATING WIRELESS BROADBAND IN THE 1755-1850 MHz BAND at 6 (March 2012),
- http://www.ntia.doc.gov/files/ntia/publications/ntia 1755 1850 mhz report march2012.pdf.
- ²⁴ Wells Fargo Securities, Wireless Spectrum Primer at 16 (March 25, 2015).
- 25 Chris Hardy, Coordinating with Incumbents Critical to AWS-3 Spectrum Success, CommScope (Feb. 3, 2015), http://www.commscope.com/Blog/Coordinating-With-Incumbents-Critical-to-AWS-3-Spectrum-Success/.
- ²⁶ Comments of T-Mobile USA, Inc., Relocation of Federal Systems in the 1710- 1755 MHz Frequency Band: Review of the Initial Implementation of the Commercial Spectrum Enhancement Act, FCC Docket No. 0906231085-91085-01 (Aug. 21, 2009).
- ²⁷ U.S. Department of Commerce, RELOCATION OF FEDERAL RADIO SYSTEMS FROM THE 1710-1755 MHz SPECTRUM BAND: EIGHTH ANNUAL PROGRESS REPORT at 2 (2015),
- http://www.ntia.doc.gov/files/ntia/publications/eighth annual report 1710-1755 relocation.pdf.
- ²⁸ Verizon, White Paper, LTE: THE FUTURE OF MOBILE BROADBAND TECHNOLOGY at 10 (2009), http://innovation.verizon.com/content/dam/vic/PDF/LTE%20The%20Future%20of%20Mobile%20Broadband%20Technology.pdf.
- ²⁹ Wells Fargo Securities, Wireless Spectrum Primer at 16 (March 25, 2015).
- ³⁰ Wells Fargo Securities, Wireless Spectrum Primer at 16 (March 25, 2015).
- ³¹ Apple, iPhone 6, Connectivity, https://www.apple.com/iphone-6/connectivity/ (last visited July 1,

2015).

- ³² Global Certification Forum, Current Scope of Certification, http://www.globalcertificationforum.org/certification/scope/current-scope.html (last visited July 1, 2015).
- ³³ Jonathan Nuechterlein, Philip J. Weiser, Digital Crossroads: Telecommunications Law and Policy in the Internet Age at 135 (2013).
- ³⁴ U.S. Department of Justice, Antitrust Division, Policies Regarding Mobile Spectrum Holdings, WT Docket No. 12-269 (June 24, 2015).
- ³⁵ Wells Fargo Securities, Wireless Spectrum Primer at 16 (March 25, 2015).
- ³⁶ Federal Communications Commission, *Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies*, WT Docket No. 13-238, Report and Order, 29 FCC Rcd 12865 (Oct. 17, 2014).
- ³⁷ Widelity, Inc., Response to the Federal Communications Commission for the Broadcaster Transition Study Solicitation at 10 (2013), https://apps.fcc.gov/edocs_public/attachmatch/DA-14-389A2.pdf.
- ³⁸ T-Mobile Comments, Sullivan Decl. at 1-5, Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies, WT Docket No. 13-238 (March 5, 2014).
- ³⁹ The White House, Executive Order Accelerating Broadband Infrastructure Deployment (June 14, 2012), https://www.whitehouse.gov/the-press-office/2012/06/14/executive-order-accelerating-broadband-infrastructure-deployment.
- ⁴⁰ CTIA Comments at 11-12, Broadband Opportunity Council Notice and Request for Comment, Docket No. 150414365-5365-01 (June 10, 2015), http://www.ctia.org/docs/default-source/Legislative-Activity/150610-ctia-comments-in-response-to-boc-notice.pdf?sfvrsn=0.
- 41 *Id.* at 16-17
- ⁴² See, e.g., Comments of AT&T at 4, Broadband Opportunity Council Notice and Request for Comment (June 10, 2015), http://www.ntia.doc.gov/files/ntia/att_services-inc_boc.pdf.
- ⁴³ U.S. General Accounting Office, Defense Spectrum Management: More Analysis Needed to Support Spectrum Use Decisions for the 1755-1850 MHz Band at 9 (2001), http://www.gao.gov/assets/240/232102.pdf. The AWS Third Report and Order reallocated the 2165-2180 MHz band for fixed and mobile services, including AWS. Federal Communications Commission, Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, ET Docket No. 00-258, Third Report and Order, Third Notice of Proposed Rulemaking and Second Memorandum Opinion and Order, 18 FCC Rcd 2223 (2002).
- ⁶⁴ Federal Communications Commission, Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, ET Docket No. 00-258, Third Report and Order, Third Notice of Proposed Rulemaking and Second Memorandum Opinion and Order, 18 FCC Rcd 2223 (2002); Federal Communications Commission, Service Rules for Advanced Wireless Services in the 2155-2175 MHz Band, WT Docket No. 07-195, Notice of Proposed Rulemaking, 22 FCC Rcd 17035 (2007); Federal Communications Commission, Service Rules for Advanced Wireless Services in the 2155-2175 MHz Band, WT Docket No. 07-195 et al., Further Notice of Proposed Rulemaking, 23 FCC Rcd 9859 (2008). The 2160-2165 MHz band "was already allocated for non-Federal Government fixed services and mobile services." Federal Communications Commission, Service Rules for Advanced Wireless Services in

the 2155-2175 MHz Band, WT Docket No. 07-195, Notice of Proposed Rulemaking at 7, fn. 13, 22 FCC Rcd 17035 (2007).

- ⁴⁵ Federal Communications Commission, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN at 86 (2010), https://transition.fcc.gov/national-broadband-plan/national-broadband-plan.pdf.
- 46 Howard Buskirk, NTIA Eyes 1675-1710 MHz Band to Pair with AWS-3 for FCC Auction, COMMUNICATIONS DAILY (June 4, 2010).
- 47 Howard Buskirk, Strickling Dashes Hope 1755 MHz Band Could Be Reallocated, COMMUNICATIONS DAILY (May 4, 2010).
- ⁴⁸ Howard Buskirk, NTIA's Look at 1755-1850 MHz Band Called Welcome News for Wireless Industry, COMMUNICATIONS DAILY (Feb. 2, 2011).
- ⁴⁹ Wireless, Communications Daily (May 26, 2010).
- ⁵⁰ Statement of Chairman Tom Wheeler, Amendment of the Commission's Rules with Regard to Commercial Operations in the 1695-1710 MHz, 1755-1780 MHz, and 2155-2180 MHz Bands, GN Docket No. 13-185, Report and Order, 29 FCC Rcd 4610 (March 31, 2014), https://apps.fcc.gov/edocs-public/attachmatch/DOC-326344A2.pdf.
- ⁵¹ Federal Communications Commission, Service Rules for Advanced Wireless Services in the 2155-2175 MHz Band, WT Docket No. 07-195, Notice of Proposed Rulemaking at 8, 22 FCC Rcd 17035 (2007).
- ⁵² Tammy Parker, *AWS-3 Auction Winners Could Face Lots of Spectrum-Coordination Hitches*, FIERCEWIRELESSTECH (Aug. 20, 2014), https://www.fiercewireless.com/tech/story/aws-3-auction-winners-could-face-lots-spectrum-coordination-hitches/2014-08-20.
- ⁵³ Federal Communications Commission, *Amendment of the Commission's Rules with Regard to Commercial Operations in the 1695-1710 MHz, 1755-1780 MHz, and 2155-2180 MHz Bands*, Report and Order, GN Docket No. 13-185, 29 FCC Rcd 4610 (2014).

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September 14, 2015

The Honorable Tom Wheeler Chairman Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Dear Chairman Wheeler:

Thank you for appearing before the Subcommittee on Communications and Technology on July 28, 2015, to testify at the hearing entitled "Continued Oversight of the Federal Communications Commission."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. The format of your responses to these questions should be as follows: (1) the name of the Member whose question you are addressing, (2) the complete text of the question you are addressing in bold, and (3) your answer to that question in plain text.

Also attached are Member requests made during the hearing. The format of your responses to these requests should follow the same format as your responses to the additional questions for the record.

To facilitate the printing of the hearing record, please respond to these questions and requests with a transmittal letter by the close of business on Monday, September 28, 2015. Your responses should be mailed to Greg Watson, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, D.C. 20515 and e-mailed in Word format to Greg.Watson@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Greg Walde

Subcommittee on Communications and Technology

cc: Anna Eshoo, Ranking Member, Subcommittee on Communications and Technology

Attachments



Federal Communications Commission Office of Legislative Affairs Washington, D.C. 20554

October 23, 2015

The Honorable Greg Walden
Chairman
Subcommittee on Communications and Technology
Committee on Energy and Commerce
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Walden:

Enclosed please find responses to Questions for the Record submitted for Chairman Tom Wheeler regarding his appearance before the Subcommittee on Communications and Technology on July 28, 2015, at the hearing entitled "Continued Oversight of the Federal Communications Commission."

If you have further questions, please contact me at (202) 418-0095.

Sincerely,

Michael Dabbs Director

cc: Anna Eshoo, Ranking Member, Subcommittee on Communications and Technology

Enclosures

Attachment 1-Additional Questions for the Record

The Honorable Marsha Blackburn

I signed bi-partisan letters to the FCC in 2013 and May 2015 to stress
the importance of wireless microphones to the performing arts and to
adopt rules that "preserve the quality and integrity of wireless
microphones" as the FCC works to implement spectrum auctions. The
FCC agreed to place wireless microphones in the duplex gap between the
uplink and downlink pieces of the new 600 MHz band along with
unlicensed users.

Last month the FCC was planning to vote on an order that would have taken away what little spectrum was going to be made available after the auction for wireless microphones in the new duplex gap by placing a broadcast station there. I appreciate that the Chairman withdrew this order, however I'm curious as to what the current plan is to make sure that wireless microphone users have dedicated spectrum?

Response: The Commission adopted new rules on August 6, 2015, to address the long-term needs of wireless microphone users by providing for continued access to the 600 MHz band and expanding access to other bands. The new rules specifically will allow all Part 74 licensed microphone users to operate in a 4-megahertz portion of the 600 MHz duplex gap (i.e., broadcasters, cable programming networks, movie studios, and operators at major sporting/concerts/theater venues). The Commission may need to place a broadcaster in the duplex gap in a limited number of markets. However, the Commission sought comment on preserving an additional vacant television channel for use by wireless microphones and white space devices should this occur.

In the May 2014 Incentive Auction Report and Order, the Commission adopted rules to implement the Broadcast Television Spectrum Incentive Auction, which will involve reorganizing the existing television band and repurposing a portion of the UHF television band for new wireless broadband services. Until the Incentive Auction is completed and the Commission establishes the final 600 MHz band plan, the impact of repurposing spectrum on wireless microphone users will not be known. The Commission has provided for a multi-year period after the auction during which wireless microphone operators may continue to access the 600 MHz band on a secondary basis. This 39-month period will help smooth the transition as wireless microphone operators obtain new equipment and transition out of the repurposed 600 MHz band to other spectrum, including vacant channels and guard bands in the post-auction 600 MHz band.

On August 6, 2015, the Commission adopted an order amending the Part 15 rules which will allow unlicensed wireless microphone users who do not qualify for a Part 74 license to operate as unlicensed devices in the TV bands and the new 600 MHz service band after the Incentive Auction. Unlicensed wireless microphones, as well as white space devices, will continue to operate on vacant channels in the TV bands on an equal basis and shall not

cause interference to adjacent licensees, although vacant channels may be fewer in number in certain geographic areas. The *Part 15 Report and Order* eliminates the current rule that permits unlicensed microphone users to register with the TVWS Database to reserve vacant TV channels for their use, but this will not occur until 18 months after the effective date of the rule change or no later than the conclusion of the Incentive Auction, whichever comes first. However, after the incentive auction and subsequent repacking of television broadcasters, unlicensed microphone users will be able to operate in the 600 MHz guard bands and duplex gap on a shared basis with white space devices, and they may have exclusive use of portions of the spectrum in the guard bands depending on the amount of spectrum recovered in the Incentive Auction.

The Honorable Renee Ellmers

- 1. Chairman Wheeler, you have proposed changes to the Lifeline program to allow eligible recipients to receive a subsidy for broadband access. I have to assume that before you make such a proposal that you have an idea of how much of an impact there will be on the fund. Do you know? Could you tell us?
 - A. Where will this money come from?
 - B. Will reforms cover it all?
 - C. Since all the other universal service programs are capped wouldn't it be prudent to cap the Lifeline fund?

Response: As the agency charged by Congress to implement rules to preserve and advance universal service, it is important that the Commission responsibly and effectively administer the resources that are contributed by ratepayers through the universal service contribution mechanisms. This requires both achieving the goal of providing low-income households meaningful access to telecommunications services and also minimizing the necessary contributions from consumers and businesses. In the Commission's 2012 Lifeline Reform Order, the Commission established clear goals and committed itself to: (1) ensuring the availability of voice service for low-income Americans; (2) ensuring the availability of broadband service for low-income Americans; and (3) minimizing the contribution burden on consumers and businesses. In that Order, the Commission also implemented several important reforms to eliminate waste, fraud, and abuse by setting a savings target, creating a National Lifeline Accountability Database (NLAD) to prevent multiple carriers from receiving support for the same household, and confirming a one-perhousehold rule applicable to all consumers and providers in the program. Due to the reforms adopted in the 2012 Order, Lifeline disbursements fell 24 percent in two years and

¹ See Lifeline and Link Up Reform and Modernization et al., WC Docket No. 11-42 et al., Report and Order and Further Notice of Proposed Rulemaking, 27 FCC Rcd 6656, 6671, para. 25 (2012).

have continued to decline, resulting in \$600 million less in disbursements in 2014 compared to 2012.

The Commission's pending Further Notice of Proposed Rulemaking on Lifeline released in June 2015 seeks comment on a budget for the Lifeline program to ensure the program continues to meet its goals, including minimizing ratepayers' contribution burden, while allowing the Commission to take into account the unique nature of the Lifeline program. The Further Notice seeks comment on a number of important implementation questions, such as the level at which any budget should be set and how the Commission can monitor and forecast demand for the program. In addition to seeking comment on the Lifeline program's finances, the Commission sought comment on ways to further reduce any incentive for waste, fraud, and abuse by having a third party, instead of service providers, determine whether consumers are eligible for Lifeline.

The Commission has already received comments from a number of stakeholders providing a variety of perspectives on how the Commission can best manage the Lifeline program's finances. The Commission continues to receive public comment on its Further Notice of Proposed Rulemaking and will consider all of the input it receives as the Commission develops final rules to modernize the Lifeline program in a way that is careful to minimize the burden on ratepayers.

2. Chairman Wheeler, you recently formed another task force to address FCC Reform. Do you have a sense when we will see that Task Force's recommendations?

Response: The Task Force that you mentioned was formed specifically to address the concerns of Commissioner offices related to internal processes and procedures. As I noted in my May 14, 2015, letter to Chairman Walden and Ranking member Eshoo, the task force is developing recommendations for proposed changes in processes relating to in the areas of transparency, rulemaking, and delegated authority here at the FCC. Topics being reviewed and considered include, but have not been limited to: (a) the use of delegated authority, and practices for providing notice of matters being handled on delegated authority; (b) procedures for pre-vote circulation of Commission-level matters; (c) procedures associated with editorial privileges after adoption of an item; (d) practices to encourage efficient Commission decision-making, such as the Consent Agenda; (e) approaches for providing increased transparency of FCC procedures and protocols; and (f) practices to track, disclose and encourage prompt Commissioner votes on items on circulation.

The Task Force has been meeting to discuss these issues, and I expect will propose a package of potential reforms to the Commissioners in the near future. I will keep the Committee apprised of our ongoing work in this area.

3. Chairman Wheeler, I believe that in the past you committed to disclose the FCC's Freedom Of Information Act- (FOIA) logs by October 1st 2014 and start requiring publication of all FOIA decisions by the same date. I believe these were also the recommendations in the staff reform report to improve transparency at the FCC. The purpose of such disclosure would be to allow the public to determine the status of pending FOIA requests at the agency as well as the outcome of requests. Have you executed on your commitment to disclose the logs and publicizing all FOIA decisions? If so, when did the FCC begin such disclosures? Where on the FCC website can the public find this information? I know you post a report summarizing certain FOIA related activities but it does not appear the logs and decisions are available. If that remains to be the case, please explain when the FCC will begin disclosing the logs and decisions.

Response: The Federal Communications Commission (FCC) complies with the Freedom of Information Act (FOIA), as well as President Obama's FOIA Memorandum, Attorney General Holder's FOIA Guidelines, and Department of Justice Office of Information Policy's (DOJ/OIP) FOIA Guidance. The FCC maintains a FOIA page on its public website (https://www.fcc.gov/foia) that provides citizens with extensive information about the FOIA process and that publishes the FCC's Quarterly, Annual, and Chief FOIA Officer Reports. These reports provide a detailed analysis of how the FCC processes the more than 700 FOIA requests it receives each year. The FCC's public FOIA web page also includes links to all of the agency's Commission-level FOIA decisions and a tool that allows the public to compare the FCC's FOIA processing to that of other agencies.

To make it easier for citizens to engage in the FOIA process, in early 2015, the FCC joined the multi-agency FOIA online system, which allows requesters to place their requests and check the status of their requests online. The FCC currently allows requesters to check the status of their own requests, but not those of other requesters.

On July 10, 2010, the DOJ OIP announced a six-month FOIA proactive disclosure pilot program, during which seven participating federal agencies will post their FOIA responses online, so that they are available not just to the FOIA requester, but also to the general public. The purpose of this pilot is to assess how a "release to one, release to all" FOIA policy would impact agency operations, privacy interests, and non-government stakeholders. For example, some journalists have expressed concern that this policy would make it difficult to write "exclusive" stories about agency materials they have obtained through the FOIA process. The FCC is not participating in this pilot program, but is closely monitoring it and will consider its results.

The Honorable Chris Collins

1. You have suggested in previous hearings that undoing forbearance decisions is a difficult task. Are you or your staff currently considering undoing any existing forbearance decisions? For example previous forbearance decisions related to special access?

Response: The Commission has received a petition from a group of industry associations and competitive carriers to reverse the forbearance granted to several ILECs from the application of certain dominant carrier regulations and Computer Inquiry requirements for certain enterprise broadband services. The Commission has also received a petition from a similar group to reverse the forbearance deemed granted to Verizon though operation of law. The Wireline Competition Bureau sought comment on those petitions, and they are currently pending.

The Honorable Anna Eshoo

- As you know, experts from the tech community contend that three channels are at a minimum needed in the 600 MHz band to stimulate and sustain investment in enhanced Wi-Fi.
 - A. Can you commit that the FCC will identify within this band at least 3 channels in every market nationwide for unlicensed use?

Response: From the outset of our work to implement the world's first incentive auction, a central goal has been to maximize the amount of spectrum made available for not only licensed use, but also unlicensed use nationwide. To that end, we have sought to provide three channels for unlicensed use by authorizing such use in the duplex gap and guard bands in the repurposed 600 MHz Band and on Channel 37, as well as proposing to preserve a vacant channel in the post-auction TV band for unlicensed use (and a second vacant channel in areas where a broadcast station is assigned to the duplex gap). We have recently taken steps to move forward on each of these elements. Earlier this year, the Commission adopted the Incentive Auction Second Order on Reconsideration, which, in part, affirmed the Commission's decision to permit unlicensed use in the 600 MHz guard bands and duplex gap and Channel 37. In August 2015, the Commission adopted technical rules for the operation of unlicensed devices in the duplex gap, guard bands, and Channel 37 that will create certainty for unlicensed device users and manufacturers while protecting licensed users and medical devices against harmful interference. We are currently reviewing the comments filed in response to the vacant channel proposal and hope to take final action on them later this year. Taken together, I believe our efforts will ensure that unlicensed spectrum will continue to be a driving force for innovation, investment, and economic growth.

- 2. As you know, today approximately two-thirds of the highly desirable spectrum below 1 GHz is held by the two largest wireless carriers.
 - A. Will you consider the incentive auction a success if it furthers the concentration of low-band spectrum among these two providers?

Response: The Incentive Auction offers an opportunity, possibly the last for years to come, for wireless providers to acquire low-band spectrum in significant quantities. Given the current asymmetries in holdings of low-band spectrum by wireless providers, one of our main priorities for the Incentive Auction has been to ensure that all providers have a meaningful opportunity to access this spectrum, which I believe is critical to facilitate a competitive marketplace. Towards this goal, the Commission adopted a groundbreaking "market based reserve" that designates up to 30 MHz of spectrum for eligible bidders on a market-by-market basis. Non-nationwide providers are eligible for reserve spectrum in every market, while the biggest providers – referred to as nationwide providers – are reserve eligible only in areas where they hold less than one-third of available low band spectrum. The size of this market based reserve reflects a balance among a number of objectives, including making additional low-band spectrum available to multiple providers, ensuring that all bidders have an opportunity to acquire a stake in the 600 MHz ecosystem, and ensuring competitive bidding.

The Honorable Ben Ray Lujan

Chairman Wheeler, I know that both of us are committed to addressing the digital divide that plagues so many tribal communities. That is why I have repeatedly expressed to you and to the FCC how important the Office of Native Affairs and Policy is to my constituents since it ensures that tribes have a seat at the table at the FCC.

1. Can you discuss the Commission's efforts to ensure robust tribal consultation and meaningful dialogue with tribal stakeholders?

Response: On July 16, 2015, the Commission submitted to the House and Senate Financial Services and General Government Appropriations Subcommittees a report on the "Implementation of the Federal Communications Commission's Statement of Policy Establishing a Government-to-Government Relationship with Indian Tribes" ("Report"). Therein, the Commission provided a complete discussion of historical and ongoing efforts to ensure robust tribal consultations. Specifically, on page 7 of the Report, the Commission provided an outline of recent efforts in this regard, followed by substantive and detailed examples of this work:

"The consultation process is critical to the Commission's efforts to fulfill its government-to-government responsibilities to Tribal Nations, as set forth in the *Tribal Policy Statement*. Robust consultation is necessary to ensure that Tribal Nations are made aware of

opportunities and proceedings at the Commission, as well as to ensure that Native voices are heard and taken into account across the Commission. Working toward these ends, the Commission conducted engagement, consultation, coordination, and training efforts. The Commission also continued to build upon its relationships among Tribal Nations to collaborate and assist on solving the often difficult problems of the digital divide in Indian Country.

Experience has shown that the consultation process is most effective when there is consultation on the ground in Indian Country and when Tribal opportunities are directly infused into all of the Commission's relevant policy making decisions based on direct input from Tribal Nations. The desired outcome is a reinvigorated Tribal consultation process undergirded by a strong, healthy, and collaborative relationship between the FCC and Tribal leaders. As a result, the FCC's approach is to utilize consultation everywhere within the Commission that matters to Tribal Nations and to do so with purposeful objectives. In 2014, the Commission bolstered its Tribal training efforts. Specifically, the Commission launched a more intensive version of its Tribal Broadband, Telecom, and Media Consultation Training Workshops, enhancing the workshops with an innovative Native Learning Lab. In addition, the FCC promoted and facilitated increased participation by Tribal Nations in media ownership by developing programs to expand awareness of and participation in the Tribal Priority for broadcast radio."

Given the size of this *Report* and its prior inclusion in the Appropriations Financial Services Subcommittee Record, the Commission will not submit the *Report* text for inclusion in this committee's record but will make it available to requesting offices.

What is the future of ONAP at the FCC? What are you doing to ensure that it has the resources it needs to succeed in its mission?

Response: The Commission created ONAP in 2010 to function as an office within the Consumer and Governmental Affairs Bureau (CGB). Under the Commission's rules, the Consumer and Governmental Affairs Bureau "develops and administers the Commission's consumer and governmental affairs policies and initiatives to enhance the public's understanding of the Commission's work and to facilitate the Agency's relations with other governmental agencies and organizations."

As part of the general internal budget process, ONAP resources are "shared resources" within CGB to maximize administrative efficiencies. CGB also provides essential leadership and oversight to ensure that ONAP activities are prioritized and properly funded. Importantly, many ONAP activities benefit from intra-agency support in other bureaus such as the Wireline Competition Bureau, the Wireless Telecommunications Bureau, the Office of General Counsel, and the Office of Managing Director. All of these offices and bureaus play a key role in ensuring that ONAP's work is supported. Although the Commission has experienced significant funding limitations related to flat-funding, we will continue to provide ONAP with the resources necessary for completing its mission and goals.

Chairman Wheeler, earlier this year, I and several of my colleagues wrote to the FCC to express our concern about how and when the FCC engages with tribal stakeholders. This was motivated by the FCC's failure to initially consult on its efforts to reform the universal service mechanism that supports rate-of-return carriers.

As you noted in your recent response, the National Tribal Telecommunications Association has submitted a proposal to the FCC to create a Tribal Broadband Factor. This proposal has been endorsed by the National Congress of American Indians.

3. I expect that the FCC will carefully review this proposal but can you discuss what steps the FCC is taking to drive investment into Indian Country?

Response: Broadband technology is critical for Tribal communities to participate fully in today's economy. I have personally seen the lack of communications services and infrastructure across Indian Country, which further generates a history of isolation that has limited economic and educational opportunities. That is why expanding high-speed broadband connections to all corners of the country is a top priority for the Commission.

At the National Congress of American Indians 2014 Executive Council Winter conference, I emphasized the importance of establishing a reinvigorated Tribal consultation process that addresses many goals, including: (1) improving access to world class broadband infrastructure; (2) access to spectrum and wireless infrastructure; and (3) ensuring a diversity of media ownership voices in Indian Country. The Commission's Office of Native Affairs and Policy (ONAP) has developed and manages a comprehensive plan to strengthen the Commission's consultation and training efforts in all regions of the country. This includes Commission-hosted regional Tribal training and consultation workshops and participation in many Indian Country outreach events. In 2015, for example, the Commission has hosted three regional training and consultation workshops (in Arizona, Oregon, and South Dakota), and has participated in numerous Tribal outreach events, including meetings of the National Congress of American Indians, the United South and Eastern Tribes, and the Affiliated Tribes of Northwest Indians

The Commission, with ONAP's leadership, plans to build upon its ongoing consultative relationship with the Tribal Nations who own and operate rate-of-return carriers. In each year since 2010, ONAP has actively engaged with NTTA both in Indian Country and at the Commission. In 2015, the Commission has engaged and consulted with Tribal Nations, NTTA, and others in Indian Country on long-term reform of rate-of-return support and plans to continue to do so.

Attachment 2-Member Requests for the Record

During the hearing, Members asked you to provide additional information for the record, and you indicated that you would provide that information. For your convenience, descriptions of the requested information are provided below.

The Honorable Gus Bilirakis

1. Chairman Wheeler, in March we discussed public safety interference complaint responses, and a resulting quarterly report, which you thought was a good idea. I know you have provided some information. Have you posted what you provided the Committee on the website so the public can see what is going on, and what you are doing?

Response: Yes, the report is posted at the following links:

http://transition.fcc.gov/eb/reports/

https://www.fcc.gov/encyclopedia/eb-documents

The Honorable Bill Johnson

 Please submit how much the FCC has spent on travel in fiscal year 2013, 2014, and 2015 by Commissioner.

Response:

Federal Communications Commission

Chairman and Commissioners Travel Amounts for Fiscal Years 2013 - 2015

Office	Term	Fiscal Year 2013	Fiscal Year 2014	Fiscal Year 2015*
Chairman Wheeler	November 2013 -Present	\$0	\$57,641	\$38,459
Commissioner Clyburn	August 2009 - Present	\$40,762	\$59,294	\$45,733
Commissioner Rosenworcel	May 2012 - Present	\$34,826	\$58,526	\$32,264
Commissioner Pai	May 2012 - Present	\$36,737	\$32,558	\$31,583
Commissioner O'Rielly	November 2013 - Present	\$0	\$32,518	\$23,891
Chairman Genachowski	June 2009 - May 2013	\$44,176	NA	NA
Commissioner McDowell	June 2006 - May 2013	\$26,079	NA	NA
Total		\$182,580	\$240,538	\$171,930

*Fiscal Year 2015 figures are as of August 4, 2015

The Honorable Billy Long

1. Chairman Wheeler, I am curious about the Broadcasters Relocation Fund, and how those monies are going to be spent. The fund is currently at \$1.75 billion, as you know, and obviously that fund was set up to pay for all of the relocation costs to the broadcasters you are required by the FCC to move to a new channel as part of the auction. After examining these issues for the last few years, has the FCC determined how many stations it is able to re-pack with that \$1.75 billion fund?

Response: Because of the voluntary nature of the Incentive Auction, we do not know in advance how many broadcasters in each market will elect to participate in the auction. At this point, however, we have no reason to believe that the \$1.75 billion Broadcaster Relocation fund will be insufficient to cover the relocation costs of broadcasters that remain on the air and must move to a new channel after the Incentive Auction. We are taking appropriate measures to disburse funds as fairly and efficiently as possible to ensure the sufficiency of the fund. We have proposed to optimize the final broadcaster channel assignments to minimize relocation costs by (1) maximizing the number of stations assigned to their pre-auction channels; and (2) avoiding reassignments of stations with high anticipated relocation costs, based on the most accurate information available. We are also encouraging broadcasters to consider ways in which they can save on expenses, including repurposing existing equipment, swapping equipment with other broadcasters, and considering ways to share equipment.

The Honorable Chris Collins

 Please provide the legislative language you might suggest that would assist you on pirate radios.

Response: Staff from the Office of Legislative Affairs and the Enforcement Bureau spoke to Congressman Collins's staff on August, 11, 2015, regarding language that would assist the Commission on pirate radio enforcement. Commission staff did not provide any specific language; however, staff explained how language authorizing the agency to take enforcement action against "aiders and abettors" to pirate radio operations would help the Enforcement Bureau shut down pirate radio operators. Pirate radio operators often are very difficult to track down, but it is much easier to identify the landlords of these premises or the entities that support the pirate operations. Providing the Commission with authority to take action against aiders and abettors will help shut down illegal operations and deter future aiding and abetting efforts. Commission staff told Congressman Collins's staff that if they were to draft legislative language, Commission staff would be happy to provide any technical assistance requested, which is the agency's standard process regarding technical assistance with potential legislative language.

FRED UPTON, MICHIGAN CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
RANKING MEMBER

ONE HUNDRED FOURTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE 2125 RAYBURN HOUSE OFFICE BUILDING WASHINGTON, DC 20515-6115 Majority (202) 225-2927

September 14, 2015

The Honorable Ajit Pai Commissioner Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Dear Commissioner Pai:

Thank you for appearing before the Subcommittee on Communications and Technology on July 28, 2015, to testify at the hearing entitled "Continued Oversight of the Federal Communications Commission."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. The format of your responses to these questions should be as follows: (1) the name of the Member whose question you are addressing, (2) the complete text of the question you are addressing in bold, and (3) your answer to that question in plain text.

To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Monday, September 28, 2015. Your responses should be mailed to Greg Watson, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, D.C. 20515 and e-mailed in Word format to Greg, Watson@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,

Greg Wald

Chairman

Subcommittee on Communications and Technology

cc: Anna Eshoo, Ranking Member, Subcommittee on Communications and Technology

Attachment

RESPONSES OF FCC COMMISSIONER AJIT PAI TO QUESTIONS FOR THE RECORD FROM THE JULY 28, 2015 HEARING OF THE SUBCOMMITTEE ON COMMUNICATIONS AND TECHNOLOGY OF THE HOUSE ENERGY AND COMMERCE COMMITTEE

The Honorable Marsha Blackburn

Q: I signed bi-partisan letters to the FCC in 2013 and May 2015 to stress the importance of wireless microphones to the performing arts and to adopt rules that "preserve the quality and integrity of wireless microphones" as the FCC works to implement spectrum auctions. The FCC agreed to place wireless microphones in the duplex gap between the uplink and downlink pieces of the new 600 MHz band along with unlicensed users.

Last month the FCC was planning to vote on an order that would have taken away what little spectrum was going to be made available after the auction for wireless microphones in the new duplex gap by placing a broadcast station there. I appreciate that the Chairman withdrew this order, however I'm curious as to what the current plan is to make sure that wireless microphone users have dedicated spectrum?

A: While the Chairman withdrew an order that would have placed broadcasters in the 600 MHz band duplex gap from consideration at the FCC's July meeting, he placed that order (FCC 15-78) on the Commission's August agenda. So on August 6, the FCC voted 3-2, with me and Commissioner Michael O'Rielly dissenting, to allow broadcasters to be placed in the duplex gap. Commissioner O'Rielly and I were far from alone in opposing that decision. Broadcasters, wireless carriers, and unlicensed advocates all criticized the decision. And while the Commission adopted the order on a party-line vote, this isn't a partisan issue. For example, Democratic Senators Blumenthal, Booker, Leahy, Schumer, and Wyden, not to mention New York City Mayor Bill de Blasio, all expressed serious concern to the Commission about placing television stations in the duplex gap. But the Commission ignored that chorus and barreled ahead anyway.

In my view, wireless microphones serve important purposes. They enable broadcasters and other video programmers to meet the needs of consumers by covering breaking news and other live events. And they are critical tools for businesses and productions across the country. On August 5, 2015, the FCC adopted an order (FCC 15-100) that made a number of changes to our rules that are intended to help wireless microphones take advantage of additional spectrum bands.

The Honorable Leonard Lance

Q: The FCC has announced that they plan on taking on consumer privacy issues in the fall. In my opinion, looking at recent enforcement actions, the FCC has had a hard time staying in the bounds of the statute on privacy issues. For example, in a recent enforcement action the Commission issued fines for a company that failed to protect consumer privacy for personal information from being released. But the Communications Act doesn't grant authority to the FCC to protect consumer privacy for personal information, only customer proprietary network information. Commissioner Pai, do you believe that the Enforcement Bureau has the authority to be the country's privacy police?

A: I share your concerns. In a recent Notice of Apparent Liability (NAL), from which Commissioner O'Rielly and I dissented, the Commission proposed to impose large forfeitures against two companies for failing to adequately protect personally identifiable information (PII), even though the Commission had never before interpreted the Communications Act to impose an enforceable duty on carriers to protect PII and had never adopted rules regarding the misappropriation, breach, or unlawful disclosure of PII. Instead, as your question indicates, the Commission's enforcement activity and rules in the area of privacy had been limited by law and practice to customer proprietary network information, a much narrower category of information than PII. The Commission's NAL, in my judgment, was thus unlawful and fundamentally at odds with due process.

Prior to the Commission's Title II order earlier this year classifying broadband service providers as telecommunications carriers, the Federal Trade Commission, which has substantial experience in the area of privacy, had the authority to police broadband providers' privacy practices. But the FCC's Title II order, which recast Internet service providers as common carriers, divested the FTC of that jurisdiction under the latter agency's common-carrier exemption. In my view, the FCC made a serious mistake. The FTC has substantial and broader experience in the area of privacy than does the FCC. Moreover, I believe that broadband providers and edge providers should be governed by consistent privacy standards. Now, however, when it comes to privacy, broadband providers will be regulated by the FCC and edge providers will be regulated by the FTC. This disparate treatment could yield marketplace distortions that will not benefit consumers and inappropriately tilt the playing field for businesses.

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